HYGIENETECH
Hygiene Technologies International, Inc.

3625 Del Amo Boulevard, Suite 180
Torrance, California 90503-1643
(310) 370-8370
(310) 370-7026 FAX
www.hygienetech.com

October 5, 2012

California State Board of Equalization
450 N Street
Sacramento, California 94279

Document No. 21209001.1

Attention: David Gau

Regarding: Limited Fungal Growth Exposure Assessment Surveys
September 2012 Random Sampling

Dear Mr. Gau:

On September 7, 14, 21, and 28, 2012, industrial hygienists with Hygiene Technologies International, Inc. (HygieneTech) conducted limited fungal growth exposure assessment surveys involving twenty two randomly selected areas located within the California State Board of Equalization (BOE) building. The findings of the surveys, along with the analytical data, conclusions, and recommendations when applicable, appear below.

On the survey dates, air samples were collected for total (viable and nonviable) fungi analyses using a Zefon brand Bio-Pump™ equipped with Air-O-Cell™ cassettes. All such samples were subsequently analyzed for fungi (including yeasts, molds, rusts, smuts, and mushrooms) by trained and experienced microbiologists at a laboratory accredited by the American Industrial Hygiene Association (AIHA) and that successfully participates in the AIHA Environmental Microbiology Proficiency Analytical Testing (EMPAT) Program. The airborne fungi assessment analytical data with supporting and background information appear in the enclosed table.

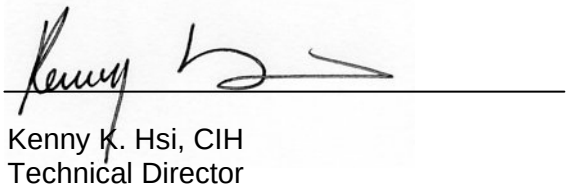
As presented in Table 21208001-1, the airborne spore count data recorded showed fungal spore types outdoors such as *Alternaria*, ascospores, basidiospores, *Chaetomium*, *Cladosporium*, colorless spores typical of *Penicillium*/*Aspergillus* species*, Curvularia, Epicoccum*, *Nigrospora*, other brown, rusts, smuts, *Stachybotrys*, *Stemphylium*, and/or *Torula.* In the indoor areas tested, the data showed that airborne fungal spores were either not detected at or above the laboratory detection limit indicated or were detected at low airborne concentrations. The fungal spore types found indoor included basidiospores, *Bipolaris/Drechslera* group, *Botrytis, Chaetomium*, *Cladosporium,* colorless spores typical of *Penicillium*/*Aspergillus* species, *Nigrospora*, *Oidium*, other brown, rusts, and/or smuts. The distribution of fungal spore types detected in the surveyed areas was consistent with those found outdoors, and the overall data within the tested areas were well below the overall outdoor data recorded. These data are considered unremarkable and are not believed to pose a health risk beyond that posed by the outdoor environment where exposures to airborne fungi are expected.

Be advised that the data provided in this report only represent limited fungal growth and exposure potentials that existed at the time these surveys were performed and at the precise sample locations indicated. Note that fungal growth and exposure potentials may change due to changes in environmental conditions (such as those caused by water intrusion), use of mechanical systems, or other factors. Also be advised that additional fungal growth may exist at one or more locations in the structure that were not specifically assessed during the surveys.

If you have any comments or questions regarding the information contained in this correspondence, please feel free to contact our offices directly at (310) 370-8370.

Sincerely,

HYGIENE TECHNOLOGIES INTERNATIONAL, INC.



Kenny K. Hsi, CIH
Technical Director

HYGIENE TECHNOLOGIES INTERNATIONAL, INC.

APPENDIX A

CLIENT: California State Board of Equalization
450 N Street
Sacramento, California 94279

TABLE 21209001-1
AIRBORNE TOTAL FUNGI RESULTS
450 N STREET
SACRAMENTO, CALIFORNIA
SEPTEMBER 7,14, 21 AND 28, 2012

Results reported in spores per cubic meter of air (spores/M^3)

SAMPLE NUMBER	**21209001-1 TM01OUT**	**21209001-1 TM02**	**21209001-1 TM03**	**21209001-1 TM04**
SAMPLING LOCATION/ACTIVITIES	Outdoors; about 10 feet east of building; approximately five feet above ground/Normal outdoor activities	1st Floor; Supply Room 128; about center; approximately five feet above floor/Normal office activities	4th Floor; Break Room 406; about center; approximately five feet above floor/Normal office activities	11th Floor; Low-Rise Elevator Lobby; about center; approximately five feet above floor/Normal office activities
DATE	09/07/12	09/07/12	09/07/12	09/07/12
START/STOP	15:36:00/15:41:00	15:48:00/15:53:00	15:58:00/16:03:00	16:06:00/16:11:00
SAMPLE TIME	5 minutes	5 minutes	5 minutes	5 minutes
Alternaria	27			
Arthrinium				
Ascospores	160			
Basidiospores	590			
Bipolaris/Drechslera group				
Botrytis				110
Chaetomium	40			13
Cladosporium	1,100			
Curvularia				
Epicoccum	27			
Fusarium				
Myrothecium				
Nigrospora	13			
Oidium				
Other brown	27			
Penicillium/Aspergillus types	210	53	53	
Pithomyces				
Rusts				
Smuts (Periconia, Myxomycetes)	80			13
Stachybotrys	13			
Stemphylium				
Torula				
Ulocladium				
Hyphal fragments	27	<13	<13	<13
Background debris*	3+	2+	3+	3+
TOTAL**	2,300	53	53	130

*Background debris is an indication of the amount of non-biological particulate matter present on the slide and is graded (from least to greatest) as 1+ to 4+.

**Note that all reported counts have been rounded to no more than two significant figures based on the sampling and analytical methods used, and therefore the total count may not equal the sum of the individual counts in a column.

HYGIENE TECHNOLOGIES INTERNATIONAL, INC.

APPENDIX A

CLIENT: California State Board of Equalization
450 N Street
Sacramento, California 94279

TABLE 21209001-1
AIRBORNE TOTAL FUNGI RESULTS
450 N STREET
SACRAMENTO, CALIFORNIA
SEPTEMBER 7,14, 21 AND 28, 2012

Results reported in spores per cubic meter of air (spores/M^3)

SAMPLE NUMBER	**21209001-1 TM05**	**21209001-1 TM06OUT**	**21209001-1 TM07**	**21209001-1 TM08**
SAMPLING LOCATION/ACTIVITIES	18th Floor; Column N20 area; about seven feet northwest of Column N20; approximately five feet above floor/Normal office activities	Outdoors; about 10 feet west of building; approximately five feet above ground/Normal outdoor activities	3rd Floor; Room 317; reception area; about center; approximately five feet above floor/Normal office activities	6th Floor; Elevator Lobby; about center; approximately five feet above floor/Normal office activities
DATE	09/07/12	09/14/12	09/14/12	09/14/12
START/STOP	16:13:00/16:18:00	15:02:00/15:07:00	15:11:00/15:16:00	15:18:00/15:23:00
SAMPLE TIME	5 minutes	5 minutes	5 minutes	5 minutes
Alternaria		13		
Ascospores		110		
Basidiospores	53	210	53	
Bipolaris/Drechslera group				
Botrytis				
Chaetomium				
Cladosporium	53	1,800		
Curvularia		13		
Epicoccum				
Fusarium				
Myrothecium				
Nigrospora				
Oidium				
Other brown				13
Penicillium/Aspergillus types		110		
Pithomyces				
Rusts	13			
Smuts (Periconia, Myxomycetes)		590	13	13
Stachybotrys				
Stemphylium				
Torula		13		
Trichocladium		13		
Ulocladium				
Hyphal fragments	<13	110	13	<13
Background debris*	2+	3+	2+	3+
TOTAL**	120	2.900	67	27

*Background debris is an indication of the amount of non-biological particulate matter present on the slide and is graded (from least to greatest) as 1+ to 4+.

**Note that all reported counts have been rounded to no more than two significant figures based on the sampling and analytical methods used, and therefore the total count may not equal the sum of the individual counts in a column.

HYGIENE TECHNOLOGIES INTERNATIONAL, INC.

APPENDIX A

CLIENT: California State Board of Equalization
450 N Street
Sacramento, California 94279

TABLE 21209001-1
AIRBORNE TOTAL FUNGI RESULTS
450 N STREET
SACRAMENTO, CALIFORNIA
SEPTEMBER 7,14, 21 AND 28, 2012

Results reported in spores per cubic meter of air (spores/M^3)

SAMPLE NUMBER	**21209001-1 TM09**	**21209001-1 TM10**	**21209001-1 TM11**	**21209001-1 TM12**
SAMPLING LOCATION/ACTIVITIES	9th Floor; northern quadrant; about seven feet north of Storage Room 9C; approximately five feet above floor/Normal office activities	14th Floor; southern hallway; about three feet south of Freight Elevator; approximately five feet above floor/Normal office activities	16th Floor; Elevator Lobby; about center; approximately five feet above floor/Normal office activities	19th Floor; Quiet Room 1908; approximately five feet above floor/Normal office activities
DATE	09/14/12	09/14/12	09/14/12	09/14/12
START/STOP	15:25:00/15:30:00	15:32:00/15:37:00	15:44:00/15:49:00	15:52:00/15:57:00
SAMPLE TIME	5 minutes	5 minutes	5 minutes	5 minutes
Alternaria				
Arthrinium				
Ascospores				
Basidiospores	53			
Bipolaris/Drechslera group				13
Botrytis				
Chaetomium				
Cladosporium		53		
Curvularia				
Epicoccum				
Fusarium				
Myrothecium				
Nigrospora				
Oidium				
Other brown				
Penicillium/Aspergillus types	53	160		
Pithomyces				
Rusts				
Smuts (Periconia, Myxomycetes)	27			13
Stachybotrys				
Stemphylium				
Torula				
Ulocladium				
Hyphal fragments	<13	13	<13	13
Background debris*	3+	3+	3+	2+
TOTAL**	130	210	<13	27

*Background debris is an indication of the amount of non-biological particulate matter present on the slide and is graded (from least to greatest) as 1+ to 4+.

**Note that all reported counts have been rounded to no more than two significant figures based on the sampling and analytical methods used, and therefore the total count may not equal the sum of the individual counts in a column.

HYGIENE TECHNOLOGIES INTERNATIONAL, INC.

APPENDIX A

CLIENT: California State Board of Equalization
450 N Street
Sacramento, California 94279

TABLE 21209001-1
AIRBORNE TOTAL FUNGI RESULTS
450 N STREET
SACRAMENTO, CALIFORNIA
SEPTEMBER 7,14, 21 AND 28, 2012

Results reported in spores per cubic meter of air (spores/M^3)

SAMPLE NUMBER	**21209001-1 TM13**	**21209001-1 TM14**	**21209001-1 TM15OUT**	**21209001-1 TM16**
SAMPLING LOCATION/ACTIVITIES	20th Floor; Break Room 2008;; about center; approximately five feet above floor/Normal office activities	24th Floor; Room 2417; about center; approximately five feet above floor/Sampling activities only	Outdoors; about 10 feet south of building; approximately five feet above ground/Normal outdoor activities	5th Floor; Column N19 area; about two feet west of Column N19; approximately five feet above floor/Normal office activities
DATE	09/14/12	09/14/12	09/21/12	09/21/12
START/STOP	16:03:00/16:08:00	16:12:00/16:17:00	10:14:00/10:19:00	10:24:00/10:29:00
SAMPLE TIME	5 minutes	5 minutes	5 minutes	5 minutes
Alternaria			13	
Arthrinium				
Ascospores			110	
Basidiospores			1,200	53
Bipolaris/Drechslera group				
Botrytis				
Chaetomium			13	
Cladosporium			2,800	
Curvularia			13	
Epicoccum			27	
Fusarium				
Myrothecium				
Nigrospora				
Oidium				
Other brown				
Penicillium/Aspergillus types		53	110	
Pithomyces				
Rusts			40	
Smuts (Periconia, Myxomycetes)			210	110
Stachybotrys				
Torula			27	
Ulocladium				
Zygomycetes				
Hyphal fragments	<13	<13	120	<13
Background debris*	2+	1+	3+	2+
TOTAL**	<13	53	4,600	160

*Background debris is an indication of the amount of non-biological particulate matter present on the slide and is graded (from least to greatest) as 1+ to 4+.

**Note that all reported counts have been rounded to no more than two significant figures based on the sampling and analytical methods used, and therefore the total count may not equal the sum of the individual counts in a column.

HYGIENE TECHNOLOGIES INTERNATIONAL, INC.

APPENDIX A

CLIENT: California State Board of Equalization
450 N Street
Sacramento, California 94279

TABLE 21209001-1
AIRBORNE TOTAL FUNGI RESULTS
450 N STREET
SACRAMENTO, CALIFORNIA
SEPTEMBER 7,14, 21 AND 28, 2012

Results reported in spores per cubic meter of air (spores/M^3)

SAMPLE NUMBER	**21209001-1 TM17**	**21209001-1 TM18**	**21209001-1 TM19**	**21209001-1 TM20**
SAMPLING LOCATION/ACTIVITIES	8th Floor; adjacent to Conference Room 802 entry door; approximately five feet above floor/Normal office activities	10th Floor; Break Room 1009; about center; approximately five feet above floor/Normal office activities	17th Floor; eastern hallway; adjacent to Room 1702; approximately five feet above floor/Normal office activities	21st Floor; south hallway; about five feet southwest of Freight Elevator; approximately five feet above floor/Normal office activities
DATE	09/21/12	09/21/12	09/21/12	09/21/12
START/STOP	10:33:00/10:38:00	10:41:00/10:46:00	10:52:00/10:57:00	11:02:00/11:07:00
SAMPLE TIME	5 minutes	5 minutes	5 minutes	5 minutes
Alternaria				
Arthrinium				
Ascospores				
Basidiospores				
Bipolaris/Drechslera group				
Botrytis				
Chaetomium				
Cladosporium				53
Curvularia				
Epicoccum				
Fusarium				
Myrothecium				
Nigrospora			13	
Oidium			13	
Other brown				
Penicillium/Aspergillus types				
Pithomyces				
Rusts				
Smuts (Periconia, Myxomycetes)	13	13	13	13
Stachybotrys				
Torula				
Ulocladium				
Zygomycetes				
Hyphal fragments	13	53	13	27
Background debris*	1+	2+	2+	2+
TOTAL**	13	13	40	67

*Background debris is an indication of the amount of non-biological particulate matter present on the slide and is graded (from least to greatest) as 1+ to 4+.

**Note that all reported counts have been rounded to no more than two significant figures based on the sampling and analytical methods used, and therefore the total count may not equal the sum of the individual counts in a column.

HYGIENE TECHNOLOGIES INTERNATIONAL, INC.

APPENDIX A

CLIENT: California State Board of Equalization
450 N Street
Sacramento, California 94279

TABLE 21209001-1
AIRBORNE TOTAL FUNGI RESULTS
450 N STREET
SACRAMENTO, CALIFORNIA
SEPTEMBER 7,14, 21 AND 28, 2012

Results reported in spores per cubic meter of air (spores/M^3)

SAMPLE NUMBER	**21209001-1 TM21OUT**	**21209001-1 TM22**	**21209001-1 TM23**	**21209001-1 TM24**
SAMPLING LOCATION/ACTIVITIES	Outdoors; about 15 feet north of building; approximately five feet above ground/Normal outdoor activities	2nd Floor; Column N19 area; about 10 feet west of Column N19; approximately five feet above floor/Normal office activities	7th Floor; Column K19 area; about 20 feet southeast of Column K19; approximately five feet above floor/Normal office activities	15th Floor; Column K22 area; about 15 feet north of Column K22; approximately five feet above floor/Normal office activities
DATE	09/28/12	09/28/12	09/28/12	09/28/12
START/STOP	12:02:00/12:07:00	12:12:00/12:17:00	12:21:00/12:26:00	12:30:00/12:35:00
SAMPLE TIME	5 minutes	5 minutes	5 minutes	5 minutes
Alternaria	53			
Arthrinium				
Ascospores	53			
Basidiospores	590	110	53	53
Bipolaris/Drechslera group				
Botrytis				
Chaetomium	40			
Cladosporium	2,600			
Curvularia				
Epicoccum				
Fusarium				
Myrothecium				
Nigrospora	93			
Oidium				
Other brown				
Penicillium/Aspergillus types	1,500			110
Pithomyces				
Rusts				
Smuts (Periconia, Myxomycetes)	1,400	13		
Stachybotrys	13			
Stemphylium	13			
Torula				
Ulocladium				
Hyphal fragments	130	<13	<13	13
Background debris*	3+	2+	2+	3+
TOTAL**	6,300	120	53	160

*Background debris is an indication of the amount of non-biological particulate matter present on the slide and is graded (from least to greatest) as 1+ to 4+.

**Note that all reported counts have been rounded to no more than two significant figures based on the sampling and analytical methods used, and therefore the total count may not equal the sum of the individual counts in a column.

HYGIENE TECHNOLOGIES INTERNATIONAL, INC.

APPENDIX A

CLIENT: California State Board of Equalization
450 N Street
Sacramento, California 94279

TABLE 21209001-1
AIRBORNE TOTAL FUNGI RESULTS
450 N STREET
SACRAMENTO, CALIFORNIA
SEPTEMBER 7,14, 21 AND 28, 2012

Results reported in spores per cubic meter of air (spores/M^3)

SAMPLE NUMBER	**21209001-1 TM25**	**21209001-1 TM26**		
SAMPLING LOCATION/ACTIVITIES	22nd Floor; Room 2210; about 10 feet west of Room 2009 entry door; approximately five feet above floor/Normal office activities	23rd Floor; northern hallway at northwestern corner; approximately five feet above floor/Normal office activities	This column intentionally left blank.	This column intentionally left blank.
DATE	09/28/12	09/28/12		
START/STOP	12:42:00/12:47:00	12:50:00/12:55:00		
SAMPLE TIME	5 minutes	5 minutes		
Alternaria				
Arthrinium				
Ascospores				
Basidiospores	110	53		
Bipolaris/Drechslera group				
Botrytis				
Chaetomium				
Cladosporium				
Curvularia				
Epicoccum				
Fusarium				
Myrothecium				
Nigrospora				
Oidium				
Other brown				
Penicillium/Aspergillus types		53		
Pithomyces				
Rusts				
Smuts (Periconia, Myxomycetes)				
Stachybotrys				
Torula				
Ulocladium				
Zygomycetes				
Hyphal fragments	<13	<13		
Background debris*	2+	2+		
TOTAL**	110	110		

*Background debris is an indication of the amount of non-biological particulate matter present on the slide and is graded (from least to greatest) as 1+ to 4+.

**Note that all reported counts have been rounded to no more than two significant figures based on the sampling and analytical methods used, and therefore the total count may not equal the sum of the individual counts in a column.

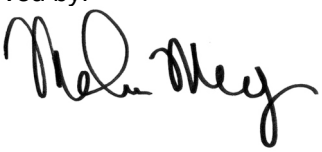
EMLab P&K
A TestAmerica Company

Report for:

Mr. Larry Sandhu
Hygiene Technologies International, Inc.: Northern California
3625 Del Amo Boulevard, Suite 180
Torrance, CA 90503-8370

Regarding: Project: 21209001-1
EML ID: 967506

Approved by:



Lab Manager
Malcolm Moody

Dates of Analysis:
Spore trap analysis: 09-11-2012

Service SOPs: Spore trap analysis (1038)
AIHA accredited service

Document Number: 200091 - Revision Number: 5

EMLab P&K
880 Riverside Parkway, West Sacramento, CA 95605
(866) 888-6653 Fax (650) 829-5852 www.emlab.com

Client: Hygiene Technologies International, Inc.: Northern California
C/O: Mr. Larry Sandhu
Re: 21209001-1

Date of Sampling: 09-07-2012
Date of Receipt: 09-10-2012
Date of Report: 09-11-2012

SPORE TRAP REPORT: NON-VIABLE METHODOLOGY

Location:	21209001-TM01out		21209001-TM02		21209001-TM03		21209001-TM04		21209001-TM05	
Comments (see below)	None		None		None		None		None	
Lab ID-Version‡:	4317583-1		4317584-1		4317585-1		4317586-1		4317587-1	
Analysis Date:	09/11/2012		09/11/2012		09/11/2012		09/11/2012		09/11/2012	
	raw ct.	spores/m3	raw ct.	spores/m3	raw ct.	spores/m3	raw ct.	spores/m3	raw ct.	spores/m3
Alternaria	2	27								
Ascospores	3	160								
Basidiospores	11	590					2	110	1	53
Chaetomium	3	40					1	13		
Cladosporium	21	1,100							1	53
Epicoccum	2	27								
Myrothecium										
Nigrospora	1	13								
Other brown	2	27								
Other colorless										
Penicillium/Aspergillus types†	4	210	1	53	1	53				
Pithomyces										
Rusts									1	13
Smuts, Periconia, Myxomycetes	6	80					1	13		
Stachybotrys	1	13								
Stemphylium										
Torula										
Ulocladium										
Zygomycetes										
Background debris (1-4+)††	3+		2+		3+		3+		2+	
Hyphal fragments/m3	27		< 13		< 13		< 13		< 13	
Pollen/m3	80		< 13		< 13		13		< 13	
Skin cells (1-4+)	1+		1+		2+		2+		1+	
Sample volume (liters)	75		75		75		75		75	
§ TOTAL SPORES/m3		2,300		53		53		130		120

Comments:

Spore types listed without a count or data entry were not detected during the course of the analysis for the respective sample.
† The spores of *Aspergillus* and *Penicillium* (and others such as *Acremonium*, *Paecilomyces*) are small and round with very few distinguishing characteristics. They cannot be differentiated by non-viable sampling methods. Also, some species with very small spores are easily missed, and may be undercounted.
††Background debris indicates the amount of non-biological particulate matter present on the trace (dust in the air) and the resulting visibility for the analyst. It is rated from 1+ (low) to 4+ (high). Counts from areas with 4+ background debris should be regarded as minimal counts and may be higher then reported. It is important to account for samples volumes when evaluating dust levels.

The analytical sensitivity is the spores/m3 divided by the raw count. The limit of detection is the analytical sensitivity multiplied by the sample volume divided by 1000.

For more information regarding analytical sensitivity, please contact QA by calling the laboratory.
‡ A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".
§ Total Spores/m3 has been rounded to two significant figures to reflect analytical precision.

EMLab P&K
880 Riverside Parkway, West Sacramento, CA 95605
(866) 888-6653 Fax (650) 829-5852 www.emlab.com

Client: Hygiene Technologies International, Inc.: Northern California
C/O: Mr. Larry Sandhu
Re: 21209001-1

Date of Sampling: 09-07-2012
Date of Receipt: 09-10-2012
Date of Report: 09-11-2012

MoldRANGE™: Extended Outdoor Comparison

Outdoor Location: 21209001-TM01out

Fungi Identified	Outdoor data	Typical Outdoor Data for: September in California (n‡=14180)†						Typical Outdoor Data for: The entire year in California (n‡=175031)†					
	spores/m3	very low	low	med	high	very high	freq %	very low	low	med	high	very high	freq %
Generally able to grow indoors*													
Alternaria	27	13	13	27	53	93	61	13	13	27	67	110	55
Bipolaris/Drechslera group	-	7	13	13	27	53	19	7	13	13	27	40	12
Chaetomium	40	8	13	13	27	53	27	8	13	13	27	44	19
Cladosporium	1,100	170	320	850	2,100	3,500	99	110	210	640	1,700	2,800	97
Curvularia	-	7	13	13	40	60	16	7	13	13	27	53	6
Epicoccum	27	7	13	13	27	53	21	8	13	13	33	53	19
Nigrospora	13	10	13	13	40	93	18	7	13	13	27	53	8
Other brown	27	13	13	13	40	53	38	13	13	13	40	53	35
Penicillium/Aspergillus types	210	53	110	270	750	1,200	90	53	110	210	590	1,000	85
Stachybotrys	13	7	13	13	27	67	5	7	13	13	33	67	4
Torula	-	7	13	13	40	67	14	8	13	13	40	67	12
Seldom found growing indoors**													
Ascospores	160	13	33	80	210	370	68	25	53	110	350	690	72
Basidiospores	590	49	67	190	480	850	93	53	80	270	1,000	2,300	94
Rusts	-	8	13	13	40	80	27	13	13	13	53	80	27
Smuts, Periconia, Myxomycetes	80	13	13	40	120	190	75	13	13	40	110	200	68
§ TOTAL SPORES/m3	2,300												

†The 'Typical Outdoor Data' represents the typical outdoor spore levels for the location and time frame indicated. The last column represents the frequency of occurrence. The very low, low, med, high, and very high values represent the 10, 20, 50, 80, and 90 percentile values of the spore type when it is detected. For example, if the frequency of occurrence is 63% and the low value is 53, it would mean that the given spore type is detected 63% of the time and, when detected, 20% of the time it is present in levels above the detection limit and below 53 spores/m3. These values are updated periodically, and if enough data is not available to make a statistically meaningful assessment, it is indicated with a dash.

§ Total Spores/m3 has been rounded to two significant figures to reflect analytical precision.

*The spores in this category are generally capable of growing on wet building materials in addition to growing outdoors. Building related growth is dependent upon the fungal type, moisture level, type of material, and other factors. *Cladosporium* is one of the predominant spore types worldwide and is frequently present in high numbers. *Penicillium/Aspergillus* species colonize both outdoor and indoor wet surfaces rapidly and are very easily dispersed. Other genera are usually present in lesser numbers.

**These fungi are generally not found growing on wet building materials. For example, the rusts and smuts are obligate plant pathogens. However, in each group there are notable exceptions. For example, agents of wood decay are members of the basidiomycetes and high counts of a single morphological type of basidiospore on an inside sample should be considered significant.

‡n = number of samples used to calculate data.

Interpretation of the data contained in this report is left to the client or the persons who conducted the field work. This report is provided for informational and comparative purposes only and should not be relied upon for any other purpose. "Typical outdoor data" are based on the results of the analysis of samples delivered to and analyzed by EMLab P&K and assumptions regarding the origins of those samples. Sampling techniques, contaminants infecting samples, unrepresentative samples and other similar or dissimilar factors may affect these results. In addition, EMLab P&K may not have received and tested a representative number of samples for every region or time period. EMLab P&K hereby disclaims any liability for any and all direct, indirect, punitive, incidental, special or consequential damages arising out of the use or interpretation of the data contained in, or any actions taken or omitted in reliance upon, this report.

EMLab P&K
880 Riverside Parkway, West Sacramento, CA 95605
(866) 888-6653 Fax (650) 829-5852 www.emlab.com

Client: Hygiene Technologies International, Inc.: Northern California
C/O: Mr. Larry Sandhu
Re: 21209001-1

Date of Sampling: 09-07-2012
Date of Receipt: 09-10-2012
Date of Report: 09-11-2012

MoldSTAT™: Supplementary Statistical Spore Trap Report

Outdoor Summary: 21209001-TM01out:

Species detected	Outdoor sample spores/m3 <100 1K 10K >100K	Typical outdoor ranges (North America)	Freq. %
Alternaria	27	7 - 33 - 560	47
Ascospores	160	13 - 190 - 5,400	77
Basidiospores	590	13 - 430 - 22,000	92
Chaetomium	40	7 - 13 - 150	10
Cladosporium	1,100	27 - 480 - 10,000	91
Epicoccum	27	7 - 20 - 360	26
Nigrospora	13	7 - 13 - 230	16
Other brown	27	7 - 13 - 120	25
Penicillium/Aspergillus types	210	13 - 160 - 2,600	70
Smuts, Periconia, Myxomycetes	80	7 - 47 - 960	65
Stachybotrys	13	7 - 13 - 530	3
Total	2,300		

The "Typical outdoor ranges" and "Freq. %" columns show the typical low, medium, and high spore counts per cubic meter and the frequency of occurrence for the given spore type. The low, medium, and high values represent the 2.5, 50, and 97.5 percentile values when the spore type is detected. For example, if the low value is 53 and the frequency of occurence is 63%, it would mean that we typically detect the given spore type on 63 percent of all outdoor samples and, when detected, 2.5% of the time it is present in levels below 53 spores/m3.

Indoor Samples

Location: 21209001-TM02

% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)
Result: 2%	dF: 3 Result: 1.6500 Critical value: 7.8147 Inside Similar: Yes	Result: 0.1667	dF: 11 Result: 0.5364 Critical value: 0.5273 Outside Similar: Yes	Score: 108 Result: Low

Species Detected	Spores/m3 <100 1K 10K >100K
Penicillium/Aspergillus types	53
Total	53

EMLab P&K
880 Riverside Parkway, West Sacramento, CA 95605
(866) 888-6653 Fax (650) 829-5852 www.emlab.com

Client: Hygiene Technologies International, Inc.: Northern California
C/O: Mr. Larry Sandhu
Re: 21209001-1

Date of Sampling: 09-07-2012
Date of Receipt: 09-10-2012
Date of Report: 09-11-2012

MoldSTAT™: Supplementary Statistical Spore Trap Report

Location: 21209001-TM03

% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)
Result: 2%	dF: 3 Result: 1.6500 Critical value: 7.8147 Inside Similar: Yes	Result: 0.1667	dF: 11 Result: 0.5364 Critical value: 0.5273 Outside Similar: Yes	Score: 108 Result: Low

Species Detected	Spores/m3 <100 1K 10K >100K
Penicillium/Aspergillus types	53
Total	53

Location: 21209001-TM04

% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)
Result: 5%	dF: 3 Result: 1.6500 Critical value: 7.8147 Inside Similar: Yes	Result: 0.4286	dF: 11 Result: 0.4864 Critical value: 0.5273 Outside Similar: No	Score: 118 Result: Low

Species Detected	Spores/m3 <100 1K 10K >100K
Basidiospores	110
Chaetomium	13
Smuts, Periconia, Myxomycetes	13
Total	130

Location: 21209001-TM05

% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)
Result: 5%	dF: 3 Result: 1.6500 Critical value: 7.8147 Inside Similar: Yes	Result: 0.2857	dF: 12 Result: 0.4825 Critical value: 0.4965 Outside Similar: No	Score: 102 Result: Low

Species Detected	Spores/m3 <100 1K 10K >100K
Basidiospores	53
Cladosporium	53
Rusts	13
Total	120

EMLab P&K
880 Riverside Parkway, West Sacramento, CA 95605
(866) 888-6653 Fax (650) 829-5852 www.emlab.com

Client: Hygiene Technologies International, Inc.: Northern California
C/O: Mr. Larry Sandhu
Re: 21209001-1

Date of Sampling: 09-07-2012
Date of Receipt: 09-10-2012
Date of Report: 09-11-2012

MoldSTAT™: Supplementary Statistical Spore Trap Report

* The Friedman chi-square statistic is a non-parametric test that examines variation in a set of data (in this case, all indoor spore counts). The null hypothesis (H0) being tested is that there is no meaningful difference in the data for all indoor locations. The alternative hypothesis (used if the test disproves the null hypothesis) is that there is a difference between the indoor locations. The null hypothesis is rejected when the result of the test is greater than the critical value. The critical value that is displayed is based on the degrees of freedom (dF) of the test and a significance level of 0.05.

** An agreement ratio is a simple method for assessing the similarity of two samples (in this case the indoor sample and the outdoor summary) based on the spore types present. A score of one indicates that the types detected in one location are the same as that in the other. A score of zero indicates that none of the types detected indoors are present outdoors. Typically, an agreement of 0.8 or higher is considered high.

*** The Spearman rank correlation is a non-parametric test that examines correlation between two sets of data (in this case the indoor location and the outdoor summary). The null hypothesis (H0) being tested is that the indoor and outdoor samples are unrelated. The alternative hypothesis (used if the test disproves the null hypothesis) is that the samples are similar. The null hypothesis is rejected when the result of the test is greater than the critical value. The critical value that is displayed is based on the degrees of freedom (dF) of the test and a significance level of 0.05.

**** MoldSCORE™ is a specialized method for examining air sampling data. It is a score between 100 and 300, with 100 indicating a greater likelihood that the airborne indoor spores originated from the outside, and 300 indicating a greater likelihood that they originated from an inside source. The Result displayed is based on the numeric score given and will be either Low, Medium, or High, indicating a low, medium, or high likelihood that the spores detected originated from an indoor source. EMLab P&Kreserves the right to, and may at anytime, modify or change the MoldScore algorithm without notice.

Interpretation of the data contained in this report is left to the client or the persons who conducted the field work. This report is provided for informational and comparative purposes only and should not be relied upon for any other purpose. "Typical outdoor ranges" are based on the results of the analysis of samples delivered to and analyzed by EMLab P&K and assumptions regarding the origins of those samples. Sampling techniques, contaminants infecting samples, unrepresentative samples and other similar or dissimilar factors may affect these results. With the statistical analysis provided, as with all statistical comparisons and analyses, false-positive and false-negative results can and do occur. EMLab P&K hereby disclaims any liability for any and all direct, indirect, punitive, incidental, special or consequential damages arising out of the data contained in, or any actions taken or omitted in reliance upon, this report.

EMLab P&K
880 Riverside Parkway, West Sacramento, CA 95605
(866) 888-6653 Fax (650) 829-5852 www.emlab.com

Client: Hygiene Technologies International, Inc.: Northern California
C/O: Mr. Larry Sandhu
Re: 21209001-1

Date of Sampling: 09-07-2012
Date of Receipt: 09-10-2012
Date of Report: 09-11-2012

MoldSCORE™: Spore Trap Report

Outdoor Sample: 21209001-TM01out

Fungi Identified	Outdoor sample spores/m3 <100 1K 10K >100K	Raw count	Spores/ m3
Generally able to grow indoors*			
Alternaria		2	27
Bipolaris/Drechslera group		ND	< 13
Chaetomium		3	40
Cladosporium		21	1,100
Curvularia		ND	< 13
Epicoccum		2	27
Nigrospora		1	13
Other brown		2	27
Penicillium/Aspergillus types†		4	210
Stachybotrys		1	13
Torula		ND	< 13
Seldom found growing indoors**			
Ascospores		3	160
Basidiospores		11	590
Rusts		ND	< 13
Smuts, Periconia, Myxomycetes		6	80
Total			**2,307**

Location: 21209001-TM02

Fungi Identified	Indoor sample spores/m3 <100 1K 10K >100K	Raw count	Spores/ m3	MoldSCORE‡ 100 200 300	Score
Generally able to grow indoors*					
Alternaria		ND	< 13		100
Bipolaris/Drechslera group		ND	< 13		100
Chaetomium		ND	< 13		100
Cladosporium		ND	< 13		100
Curvularia		ND	< 13		100
Nigrospora		ND	< 13		100
Penicillium/Aspergillus types†		1	53		108
Stachybotrys		ND	< 13		100
Torula		ND	< 13		100
Seldom found growing indoors**					
Ascospores		ND	< 13		100
Basidiospores		ND	< 13		100
Rusts		ND	< 13		100
Smuts, Periconia, Myxomycetes		ND	< 13		100
Total			**53**	**Final MoldSCORE**	**108**

EMLab P&K
880 Riverside Parkway, West Sacramento, CA 95605
(866) 888-6653 Fax (650) 829-5852 www.emlab.com

Client: Hygiene Technologies International, Inc.: Northern California
C/O: Mr. Larry Sandhu
Re: 21209001-1

Date of Sampling: 09-07-2012
Date of Receipt: 09-10-2012
Date of Report: 09-11-2012

MoldSCORE™: Spore Trap Report

Location: 21209001-TM03

Fungi Identified	Indoor sample spores/m3 <100 1K 10K >100K	Raw count	Spores/ m3	MoldSCORE‡ 100 200 300	Score
Generally able to grow indoors*					
Alternaria		ND	< 13		100
Bipolaris/Drechslera group		ND	< 13		100
Chaetomium		ND	< 13		100
Cladosporium		ND	< 13		100
Curvularia		ND	< 13		100
Nigrospora		ND	< 13		100
Penicillium/Aspergillus types†		1	53		108
Stachybotrys		ND	< 13		100
Torula		ND	< 13		100
Seldom found growing indoors**					
Ascospores		ND	< 13		100
Basidiospores		ND	< 13		100
Rusts		ND	< 13		100
Smuts, Periconia, Myxomycetes		ND	< 13		100
Total			**53**	**Final MoldSCORE**	**108**

Location: 21209001-TM04

Fungi Identified	Indoor sample spores/m3 <100 1K 10K >100K	Raw count	Spores/ m3	MoldSCORE‡ 100 200 300	Score
Generally able to grow indoors*					
Alternaria		ND	< 13		100
Bipolaris/Drechslera group		ND	< 13		100
Chaetomium		1	13		118
Cladosporium		ND	< 13		100
Curvularia		ND	< 13		100
Nigrospora		ND	< 13		100
Penicillium/Aspergillus types†		ND	< 13		100
Stachybotrys		ND	< 13		100
Torula		ND	< 13		100
Seldom found growing indoors**					
Ascospores		ND	< 13		100
Basidiospores		2	110		108
Rusts		ND	< 13		100
Smuts, Periconia, Myxomycetes		1	13		102
Total			**133**	**Final MoldSCORE**	**118**

EMLab P&K
880 Riverside Parkway, West Sacramento, CA 95605
(866) 888-6653 Fax (650) 829-5852 www.emlab.com

Client: Hygiene Technologies International, Inc.: Northern California
C/O: Mr. Larry Sandhu
Re: 21209001-1

Date of Sampling: 09-07-2012
Date of Receipt: 09-10-2012
Date of Report: 09-11-2012

MoldSCORE™: Spore Trap Report

Location: 21209001-TM05

Fungi Identified	Indoor sample spores/m3 <100 1K 10K >100K	Raw count	Spores/ m3	MoldSCORE‡ 100 200 300	Score
Generally able to grow indoors*					
Alternaria		ND	< 13		100
Bipolaris/Drechslera group		ND	< 13		100
Chaetomium		ND	< 13		100
Cladosporium		1	53		100
Curvularia		ND	< 13		100
Nigrospora		ND	< 13		100
Penicillium/Aspergillus types†		ND	< 13		100
Stachybotrys		ND	< 13		100
Torula		ND	< 13		100
Seldom found growing indoors**					
Ascospores		ND	< 13		100
Basidiospores		1	53		102
Rusts		1	13		105
Smuts, Periconia, Myxomycetes		ND	< 13		100
Total			**120**	**Final MoldSCORE**	**102**

*The spores in this category are generally capable of growing on wet building materials in addition to growing outdoors. Building related growth is dependent upon the fungal type, moisture level, type of material, and other factors. *Cladosporium* is one of the predominant spore types worldwide and is frequently present in high numbers. *Penicillium/Aspergillus* species colonize both outdoor and indoor wet surfaces rapidly and are very easily dispersed. Other genera are usually present in lesser numbers.

**These fungi are generally not found growing on wet building materials. For example, the rusts and smuts are obligate plant pathogens. However, in each group there are notable exceptions. For example, agents of wood decay are members of the basidiomycetes and high counts of a single morphological type of basidiospore on an inside sample should be considered significant.

†The spores of Aspergillus and Penicillium (and others such as Acremonium, Paecilomyces) are small and round with very few distinguishing characteristics. They cannot be differentiated by non-viable sampling methods.

‡Rated on a scale from 100 to 300. A rating less than 150 is low and indicates a low probability of spores originating inside. A rating greater than 250 is high and indicates a high probability that the spores originated from inside, presumably from indoor mold growth. A rating between 150 and 250 indicates a moderate likelihood of indoor fungal growth. MoldSCORE is NOT intended for wall cavity samples. It is intended for ambient air samples in residences. Using the analysis on other samples (like wall cavity samples) will lead to misleading results.

EMLab P&K
A TestAmerica Company

Report for:

Mr. Kenny Hsi, Mr. Larry Sandhu
Hygiene Technologies International, Inc.: Northern California
3625 Del Amo Boulevard, Suite 180
Torrance, CA 90503-8370

Regarding: Project: 21209001-1
EML ID: 970982

Approved by:

Lab Manager
Malcolm Moody

Dates of Analysis:
Spore trap analysis: 09-18-2012

Service SOPs: Spore trap analysis (1038)
AIHA accredited service

Document Number: 200091 - Revision Number: 5

EMLab P&K
880 Riverside Parkway, West Sacramento, CA 95605
(866) 888-6653 Fax (650) 829-5852 www.emlab.com

Client: Hygiene Technologies International, Inc.: Northern California
C/O: Mr. Kenny Hsi, Mr. Larry Sandhu
Re: 21209001-1

Date of Sampling: 09-14-2012
Date of Receipt: 09-17-2012
Date of Report: 09-18-2012

SPORE TRAP REPORT: NON-VIABLE METHODOLOGY

Location:	21209001-1 TM06 OUT		21209001-1 TM07		21209001-1 TM08	
Comments (see below)	None		None		None	
Lab ID-Version‡:	4331593-1		4331594-1		4331595-1	
Analysis Date:	09/18/2012		09/18/2012		09/18/2012	
	raw ct.	spores/m3	raw ct.	spores/m3	raw ct.	spores/m3
Alternaria	1	13				
Ascospores	2	110				
Basidiospores	4	210	1	53		
Bipolaris/Drechslera group						
Chaetomium						
Cladosporium	34	1,800				
Curvularia	1	13				
Myrothecium						
Nigrospora						
Other brown					1	13
Other colorless						
Penicillium/Aspergillus types†	2	110				
Pithomyces						
Rusts						
Smuts, Periconia, Myxomycetes	44	590	1	13	1	13
Stachybotrys						
Stemphylium						
Torula	1	13				
Trichocladium	1	13				
Ulocladium						
Zygomycetes						
Background debris (1-4+)††	3+		2+		3+	
Hyphal fragments/m3	110		13		< 13	
Pollen/m3	320		13		13	
Skin cells (1-4+)	< 1+		2+		2+	
Sample volume (liters)	75		75		75	
§ TOTAL SPORES/m3		2,900		67		27

Comments:

Spore types listed without a count or data entry were not detected during the course of the analysis for the respective sample.
† The spores of *Aspergillus* and *Penicillium* (and others such as *Acremonium*, *Paecilomyces*) are small and round with very few distinguishing characteristics. They cannot be differentiated by non-viable sampling methods. Also, some species with very small spores are easily missed, and may be undercounted.
††Background debris indicates the amount of non-biological particulate matter present on the trace (dust in the air) and the resulting visibility for the analyst. It is rated from 1+ (low) to 4+ (high). Counts from areas with 4+ background debris should be regarded as minimal counts and may be higher then reported. It is important to account for samples volumes when evaluating dust levels.

The analytical sensitivity is the spores/m3 divided by the raw count. The limit of detection is the analytical sensitivity multiplied by the sample volume divided by 1000.

For more information regarding analytical sensitivity, please contact QA by calling the laboratory.
‡ A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".
§ Total Spores/m3 has been rounded to two significant figures to reflect analytical precision.

EMLab P&K
880 Riverside Parkway, West Sacramento, CA 95605
(866) 888-6653 Fax (650) 829-5852 www.emlab.com

Client: Hygiene Technologies International, Inc.: Northern California
C/O: Mr. Kenny Hsi, Mr. Larry Sandhu
Re: 21209001-1

Date of Sampling: 09-14-2012
Date of Receipt: 09-17-2012
Date of Report: 09-18-2012

SPORE TRAP REPORT: NON-VIABLE METHODOLOGY

Location:	21209001-1 TM09		21209001-1 TM10		21209001-1 TM11	
Comments (see below)	None		None		None	
Lab ID-Version‡:	4331596-1		4331597-1		4331598-1	
Analysis Date:	09/18/2012		09/18/2012		09/18/2012	
	raw ct.	spores/m3	raw ct.	spores/m3	raw ct.	spores/m3
Alternaria						
Ascospores						
Basidiospores	1	53				
Bipolaris/Drechslera group						
Chaetomium						
Cladosporium			1	53		
Curvularia						
Myrothecium						
Nigrospora						
Other brown						
Other colorless						
Penicillium/Aspergillus types†	1	53	3	160		
Pithomyces						
Rusts						
Smuts, Periconia, Myxomycetes	2	27				
Stachybotrys						
Stemphylium						
Torula						
Trichocladium						
Ulocladium						
Zygomycetes						
Background debris (1-4+)††	3+		3+		3+	
Hyphal fragments/m3	< 13		13		< 13	
Pollen/m3	13		< 13		< 13	
Skin cells (1-4+)	2+		2+		2+	
Sample volume (liters)	75		75		75	
§ TOTAL SPORES/m3		130		210		< 13

Comments:

Spore types listed without a count or data entry were not detected during the course of the analysis for the respective sample.
† The spores of *Aspergillus* and *Penicillium* (and others such as *Acremonium*, *Paecilomyces*) are small and round with very few distinguishing characteristics. They cannot be differentiated by non-viable sampling methods. Also, some species with very small spores are easily missed, and may be undercounted.
††Background debris indicates the amount of non-biological particulate matter present on the trace (dust in the air) and the resulting visibility for the analyst. It is rated from 1+ (low) to 4+ (high). Counts from areas with 4+ background debris should be regarded as minimal counts and may be higher then reported. It is important to account for samples volumes when evaluating dust levels.

The analytical sensitivity is the spores/m3 divided by the raw count. The limit of detection is the analytical sensitivity multiplied by the sample volume divided by 1000.

For more information regarding analytical sensitivity, please contact QA by calling the laboratory.
‡ A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".
§ Total Spores/m3 has been rounded to two significant figures to reflect analytical precision.

EMLab P&K
880 Riverside Parkway, West Sacramento, CA 95605
(866) 888-6653 Fax (650) 829-5852 www.emlab.com

Client: Hygiene Technologies International, Inc.: Northern California
C/O: Mr. Kenny Hsi, Mr. Larry Sandhu
Re: 21209001-1

Date of Sampling: 09-14-2012
Date of Receipt: 09-17-2012
Date of Report: 09-18-2012

SPORE TRAP REPORT: NON-VIABLE METHODOLOGY

Location:	21209001-1 TM12		21209001-1 TM13		21209001-1 TM14	
Comments (see below)	None		None		None	
Lab ID-Version‡:	4331599-1		4331600-1		4331601-1	
Analysis Date:	09/18/2012		09/18/2012		09/18/2012	
	raw ct.	spores/m3	raw ct.	spores/m3	raw ct.	spores/m3
Alternaria						
Ascospores						
Basidiospores						
Bipolaris/Drechslera group	1	13				
Chaetomium						
Cladosporium						
Curvularia						
Myrothecium						
Nigrospora						
Other brown						
Other colorless						
Penicillium/Aspergillus types†					1	53
Pithomyces						
Rusts						
Smuts, Periconia, Myxomycetes	1	13				
Stachybotrys						
Stemphylium						
Torula						
Trichocladium						
Ulocladium						
Zygomycetes						
Background debris (1-4+)††	2+		2+		1+	
Hyphal fragments/m3	13		< 13		< 13	
Pollen/m3	< 13		< 13		< 13	
Skin cells (1-4+)	2+		1+		1+	
Sample volume (liters)	75		75		75	
§ TOTAL SPORES/m3		27		< 13		53

Comments:

Spore types listed without a count or data entry were not detected during the course of the analysis for the respective sample.
† The spores of *Aspergillus* and *Penicillium* (and others such as *Acremonium*, *Paecilomyces*) are small and round with very few distinguishing characteristics. They cannot be differentiated by non-viable sampling methods. Also, some species with very small spores are easily missed, and may be undercounted.
††Background debris indicates the amount of non-biological particulate matter present on the trace (dust in the air) and the resulting visibility for the analyst. It is rated from 1+ (low) to 4+ (high). Counts from areas with 4+ background debris should be regarded as minimal counts and may be higher then reported. It is important to account for samples volumes when evaluating dust levels.

The analytical sensitivity is the spores/m3 divided by the raw count. The limit of detection is the analytical sensitivity multiplied by the sample volume divided by 1000.

For more information regarding analytical sensitivity, please contact QA by calling the laboratory.
‡ A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".
§ Total Spores/m3 has been rounded to two significant figures to reflect analytical precision.

EMLab P&K
880 Riverside Parkway, West Sacramento, CA 95605
(866) 888-6653 Fax (650) 829-5852 www.emlab.com

Client: Hygiene Technologies International, Inc.: Northern California
C/O: Mr. Kenny Hsi, Mr. Larry Sandhu
Re: 21209001-1

Date of Sampling: 09-14-2012
Date of Receipt: 09-17-2012
Date of Report: 09-18-2012

MoldRANGE™: Extended Outdoor Comparison

Outdoor Location: 21209001-1 TM06 OUT

Fungi Identified	Outdoor data	Typical Outdoor Data for: September in California (n‡=14180)†						Typical Outdoor Data for: The entire year in California (n‡=175031)†					
	spores/m3	very low	low	med	high	very high	freq %	very low	low	med	high	very high	freq %
Generally able to grow indoors*													
Alternaria	13	13	13	27	53	93	61	13	13	27	67	110	55
Bipolaris/Drechslera group	-	7	13	13	27	53	19	7	13	13	27	40	12
Chaetomium	-	8	13	13	27	53	27	8	13	13	27	44	19
Cladosporium	1,800	170	320	850	2,100	3,500	99	110	210	640	1,700	2,800	97
Curvularia	13	7	13	13	40	60	16	7	13	13	27	53	6
Nigrospora	-	10	13	13	40	93	18	7	13	13	27	53	8
Penicillium/Aspergillus types	110	53	110	270	750	1,200	90	53	110	210	590	1,000	85
Stachybotrys	-	7	13	13	27	67	5	7	13	13	33	67	4
Torula	13	7	13	13	40	67	14	8	13	13	40	67	12
Trichocladium	13	7	11	13	13	27	2	7	13	13	13	27	2
Seldom found growing indoors**													
Ascospores	110	13	33	80	210	370	68	25	53	110	350	690	72
Basidiospores	210	49	67	190	480	850	93	53	80	270	1,000	2,300	94
Rusts	-	8	13	13	40	80	27	13	13	13	53	80	27
Smuts, Periconia, Myxomycetes	590	13	13	40	120	190	75	13	13	40	110	200	68
§ TOTAL SPORES/m3	2,900												

†The 'Typical Outdoor Data' represents the typical outdoor spore levels for the location and time frame indicated. The last column represents the frequency of occurrence. The very low, low, med, high, and very high values represent the 10, 20, 50, 80, and 90 percentile values of the spore type when it is detected. For example, if the frequency of occurrence is 63% and the low value is 53, it would mean that the given spore type is detected 63% of the time and, when detected, 20% of the time it is present in levels above the detection limit and below 53 spores/m3. These values are updated periodically, and if enough data is not available to make a statistically meaningful assessment, it is indicated with a dash.

§ Total Spores/m3 has been rounded to two significant figures to reflect analytical precision.

*The spores in this category are generally capable of growing on wet building materials in addition to growing outdoors. Building related growth is dependent upon the fungal type, moisture level, type of material, and other factors. *Cladosporium* is one of the predominant spore types worldwide and is frequently present in high numbers. *Penicillium/Aspergillus* species colonize both outdoor and indoor wet surfaces rapidly and are very easily dispersed. Other genera are usually present in lesser numbers.

**These fungi are generally not found growing on wet building materials. For example, the rusts and smuts are obligate plant pathogens. However, in each group there are notable exceptions. For example, agents of wood decay are members of the basidiomycetes and high counts of a single morphological type of basidiospore on an inside sample should be considered significant.

‡n = number of samples used to calculate data.

Interpretation of the data contained in this report is left to the client or the persons who conducted the field work. This report is provided for informational and comparative purposes only and should not be relied upon for any other purpose. "Typical outdoor data" are based on the results of the analysis of samples delivered to and analyzed by EMLab P&K and assumptions regarding the origins of those samples. Sampling techniques, contaminants infecting samples, unrepresentative samples and other similar or dissimilar factors may affect these results. In addition, EMLab P&K may not have received and tested a representative number of samples for every region or time period. EMLab P&K hereby disclaims any liability for any and all direct, indirect, punitive, incidental, special or consequential damages arising out of the use or interpretation of the data contained in, or any actions taken or omitted in reliance upon, this report.

EMLab P&K
880 Riverside Parkway, West Sacramento, CA 95605
(866) 888-6653 Fax (650) 829-5852 www.emlab.com

Client: Hygiene Technologies International, Inc.: Northern California
C/O: Mr. Kenny Hsi, Mr. Larry Sandhu
Re: 21209001-1

Date of Sampling: 09-14-2012
Date of Receipt: 09-17-2012
Date of Report: 09-18-2012

MoldSTAT™: Supplementary Statistical Spore Trap Report

Outdoor Summary: 21209001-1 TM06 OUT:

Species detected	Outdoor sample spores/m3 (<100 / 1K / 10K / >100K)	Typical outdoor ranges (North America)	Freq. %
Alternaria	13	7 - 33 - 560	47
Ascospores	110	13 - 190 - 5,400	77
Basidiospores	210	13 - 430 - 22,000	92
Cladosporium	1,800	27 - 480 - 10,000	91
Curvularia	13	7 - 27 - 610	18
Penicillium/Aspergillus types	110	13 - 160 - 2,600	70
Smuts, Periconia, Myxomycetes	590	7 - 47 - 960	65
Torula	13	7 - 13 - 170	9
Trichocladium	13	7 - 13 - 67	< 1
Total	2,900		

The "Typical outdoor ranges" and "Freq. %" columns show the typical low, medium, and high spore counts per cubic meter and the frequency of occurrence for the given spore type. The low, medium, and high values represent the 2.5, 50, and 97.5 percentile values when the spore type is detected. For example, if the low value is 53 and the frequency of occurence is 63%, it would mean that we typically detect the given spore type on 63 percent of all outdoor samples and, when detected, 2.5% of the time it is present in levels below 53 spores/m3.

Indoor Samples

Location: 21209001-1 TM07

% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)
Result: 2%	dF: 7 Result: 3.9722 Critical value: 14.0671 Inside Similar: Yes	Result: 0.3636	dF: 9 Result: 0.6458 Critical value: 0.5833 Outside Similar: Yes	Score: 105 Result: Low

Species Detected	Spores/m3 (<100 / 1K / 10K / >100K)
Basidiospores	53
Smuts, Periconia, Myxomycetes	13
Total	67

EMLab P&K
880 Riverside Parkway, West Sacramento, CA 95605
(866) 888-6653 Fax (650) 829-5852 www.emlab.com

Client: Hygiene Technologies International, Inc.: Northern California
C/O: Mr. Kenny Hsi, Mr. Larry Sandhu
Re: 21209001-1

Date of Sampling: 09-14-2012
Date of Receipt: 09-17-2012
Date of Report: 09-18-2012

MoldSTAT™: Supplementary Statistical Spore Trap Report

Location: 21209001-1 TM08

% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)
Result: < 1%	dF: 7 Result: 3.9722 Critical value: 14.0671 Inside Similar: Yes	Result: 0.1818	dF: 10 Result: 0.2303 Critical value: 0.5515 Outside Similar: No	Score: 107 Result: Low

Species Detected	Spores/m3 (<100 / 1K / 10K / >100K)
Other brown	13
Smuts, Periconia, Myxomycetes	13
Total	27

Location: 21209001-1 TM09

% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)
Result: 4%	dF: 7 Result: 3.9722 Critical value: 14.0671 Inside Similar: Yes	Result: 0.5000	dF: 9 Result: 0.5792 Critical value: 0.5833 Outside Similar: No	Score: 108 Result: Low

Species Detected	Spores/m3 (<100 / 1K / 10K / >100K)
Basidiospores	53
Penicillium/Aspergillus types	53
Smuts, Periconia, Myxomycetes	27
Total	130

Location: 21209001-1 TM10

% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)
Result: 7%	dF: 7 Result: 3.9722 Critical value: 14.0671 Inside Similar: Yes	Result: 0.3636	dF: 9 Result: 0.5875 Critical value: 0.5833 Outside Similar: Yes	Score: 124 Result: Low

Species Detected	Spores/m3 (<100 / 1K / 10K / >100K)
Cladosporium	53
Penicillium/Aspergillus types	160
Total	210

EMLab P&K
880 Riverside Parkway, West Sacramento, CA 95605
(866) 888-6653 Fax (650) 829-5852 www.emlab.com

Client: Hygiene Technologies International, Inc.: Northern California
C/O: Mr. Kenny Hsi, Mr. Larry Sandhu
Re: 21209001-1

Date of Sampling: 09-14-2012
Date of Receipt: 09-17-2012
Date of Report: 09-18-2012

MoldSTAT™: Supplementary Statistical Spore Trap Report

Location: 21209001-1 TM11

% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)
Result: < 1%	dF: 7 Result: 3.9722 Critical value: 14.0671 Inside Similar: Yes	Result: 0.0000	dF: N/A Result: N/A Critical value: N/A Outside Similar: N/A	Score: 100 Result: Low

Species Detected	Spores/m3 <100 1K 10K >100K
None Detected	< 13

Location: 21209001-1 TM12

% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)
Result: < 1%	dF: 7 Result: 3.9722 Critical value: 14.0671 Inside Similar: Yes	Result: 0.1818	dF: 10 Result: 0.2303 Critical value: 0.5515 Outside Similar: No	Score: 107 Result: Low

Species Detected	Spores/m3 <100 1K 10K >100K
Bipolaris/Drechslera group	13
Smuts, Periconia, Myxomycetes	13
Total	27

Location: 21209001-1 TM13

% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)
Result: < 1%	dF: 7 Result: 3.9722 Critical value: 14.0671 Inside Similar: Yes	Result: 0.0000	dF: N/A Result: N/A Critical value: N/A Outside Similar: N/A	Score: 100 Result: Low

Species Detected	Spores/m3 <100 1K 10K >100K
None Detected	< 13

EMLab P&K
880 Riverside Parkway, West Sacramento, CA 95605
(866) 888-6653 Fax (650) 829-5852 www.emlab.com

Client: Hygiene Technologies International, Inc.: Northern California
C/O: Mr. Kenny Hsi, Mr. Larry Sandhu
Re: 21209001-1

Date of Sampling: 09-14-2012
Date of Receipt: 09-17-2012
Date of Report: 09-18-2012

MoldSTAT™: Supplementary Statistical Spore Trap Report

Location: 21209001-1 TM14

% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)
Result: 1%	dF: 7 Result: 3.9722 Critical value: 14.0671 Inside Similar: Yes	Result: 0.2000	dF: 9 Result: 0.4333 Critical value: 0.5833 Outside Similar: No	Score: 108 Result: Low

Species Detected	Spores/m3 <100 1K 10K >100K
Penicillium/Aspergillus types	53
Total	53

* The Friedman chi-square statistic is a non-parametric test that examines variation in a set of data (in this case, all indoor spore counts). The null hypothesis (H0) being tested is that there is no meaningful difference in the data for all indoor locations. The alternative hypothesis (used if the test disproves the null hypothesis) is that there is a difference between the indoor locations. The null hypothesis is rejected when the result of the test is greater than the critical value. The critical value that is displayed is based on the degrees of freedom (dF) of the test and a significance level of 0.05.

** An agreement ratio is a simple method for assessing the similarity of two samples (in this case the indoor sample and the outdoor summary) based on the spore types present. A score of one indicates that the types detected in one location are the same as that in the other. A score of zero indicates that none of the types detected indoors are present outdoors. Typically, an agreement of 0.8 or higher is considered high.

*** The Spearman rank correlation is a non-parametric test that examines correlation between two sets of data (in this case the indoor location and the outdoor summary). The null hypothesis (H0) being tested is that the indoor and outdoor samples are unrelated. The alternative hypothesis (used if the test disproves the null hypothesis) is that the samples are similar. The null hypothesis is rejected when the result of the test is greater than the critical value. The critical value that is displayed is based on the degrees of freedom (dF) of the test and a significance level of 0.05.

**** MoldSCORE™ is a specialized method for examining air sampling data. It is a score between 100 and 300, with 100 indicating a greater likelihood that the airborne indoor spores originated from the outside, and 300 indicating a greater likelihood that they originated from an inside source. The Result displayed is based on the numeric score given and will be either Low, Medium, or High, indicating a low, medium, or high likelihood that the spores detected originated from an indoor source. EMLab P&Kreserves the right to, and may at anytime, modify or change the MoldScore algorithm without notice.

Interpretation of the data contained in this report is left to the client or the persons who conducted the field work. This report is provided for informational and comparative purposes only and should not be relied upon for any other purpose. "Typical outdoor ranges" are based on the results of the analysis of samples delivered to and analyzed by EMLab P&K and assumptions regarding the origins of those samples. Sampling techniques, contaminants infecting samples, unrepresentative samples and other similar or dissimilar factors may affect these results. With the statistical analysis provided, as with all statistical comparisons and analyses, false-positive and false-negative results can and do occur. EMLab P&K hereby disclaims any liability for any and all direct, indirect, punitive, incidental, special or consequential damages arising out of the data contained in, or any actions taken or omitted in reliance upon, this report.

EMLab P&K
880 Riverside Parkway, West Sacramento, CA 95605
(866) 888-6653 Fax (650) 829-5852 www.emlab.com

Client: Hygiene Technologies International, Inc.: Northern California
C/O: Mr. Kenny Hsi, Mr. Larry Sandhu
Re: 21209001-1

Date of Sampling: 09-14-2012
Date of Receipt: 09-17-2012
Date of Report: 09-18-2012

MoldSCORE™: Spore Trap Report

Outdoor Sample: 21209001-1 TM06 OUT

Fungi Identified	Outdoor sample spores/m3 <100 1K 10K >100K	Raw count	Spores/ m3
Generally able to grow indoors*			
Alternaria		1	13
Bipolaris/Drechslera group		ND	< 13
Chaetomium		ND	< 13
Cladosporium		34	1,800
Curvularia		1	13
Nigrospora		ND	< 13
Penicillium/Aspergillus types†		2	110
Stachybotrys		ND	< 13
Torula		1	13
Trichocladium		1	13
Seldom found growing indoors**			
Ascospores		2	110
Basidiospores		4	210
Rusts		ND	< 13
Smuts, Periconia, Myxomycetes		44	590
Total			**2,880**

Location: 21209001-1 TM07

Fungi Identified	Indoor sample spores/m3 <100 1K 10K >100K	Raw count	Spores/ m3	MoldSCORE‡ 100 200 300	Score
Generally able to grow indoors*					
Alternaria		ND	< 13		100
Bipolaris/Drechslera group		ND	< 13		100
Chaetomium		ND	< 13		100
Cladosporium		ND	< 13		100
Curvularia		ND	< 13		100
Nigrospora		ND	< 13		100
Penicillium/Aspergillus types†		ND	< 13		100
Stachybotrys		ND	< 13		100
Torula		ND	< 13		100
Seldom found growing indoors**					
Ascospores		ND	< 13		100
Basidiospores		1	53		105
Rusts		ND	< 13		100
Smuts, Periconia, Myxomycetes		1	13		100
Total			**67**	**Final MoldSCORE**	**105**

EMLab P&K
880 Riverside Parkway, West Sacramento, CA 95605
(866) 888-6653 Fax (650) 829-5852 www.emlab.com

Client: Hygiene Technologies International, Inc.: Northern California
C/O: Mr. Kenny Hsi, Mr. Larry Sandhu
Re: 21209001-1

Date of Sampling: 09-14-2012
Date of Receipt: 09-17-2012
Date of Report: 09-18-2012

MoldSCORE™: Spore Trap Report

Location: 21209001-1 TM08

Fungi Identified	Indoor sample spores/m3 <100 1K 10K >100K	Raw count	Spores/ m3	MoldSCORE‡ 100 200 300	Score
Generally able to grow indoors*					
Alternaria		ND	< 13		100
Bipolaris/Drechslera group		ND	< 13		100
Chaetomium		ND	< 13		100
Cladosporium		ND	< 13		100
Curvularia		ND	< 13		100
Nigrospora		ND	< 13		100
Other brown		1	13		105
Penicillium/Aspergillus types†		ND	< 13		100
Stachybotrys		ND	< 13		100
Torula		ND	< 13		100
Seldom found growing indoors**					
Ascospores		ND	< 13		100
Basidiospores		ND	< 13		100
Rusts		ND	< 13		100
Smuts, Periconia, Myxomycetes		1	13		101
Total			**27**	**Final MoldSCORE**	**107**

Location: 21209001-1 TM09

Fungi Identified	Indoor sample spores/m3 <100 1K 10K >100K	Raw count	Spores/ m3	MoldSCORE‡ 100 200 300	Score
Generally able to grow indoors*					
Alternaria		ND	< 13		100
Bipolaris/Drechslera group		ND	< 13		100
Chaetomium		ND	< 13		100
Cladosporium		ND	< 13		100
Curvularia		ND	< 13		100
Nigrospora		ND	< 13		100
Penicillium/Aspergillus types†		1	53		108
Stachybotrys		ND	< 13		100
Torula		ND	< 13		100
Seldom found growing indoors**					
Ascospores		ND	< 13		100
Basidiospores		1	53		105
Rusts		ND	< 13		100
Smuts, Periconia, Myxomycetes		2	27		100
Total			**133**	**Final MoldSCORE**	**108**

EMLab P&K
880 Riverside Parkway, West Sacramento, CA 95605
(866) 888-6653 Fax (650) 829-5852 www.emlab.com

Client: Hygiene Technologies International, Inc.: Northern California
C/O: Mr. Kenny Hsi, Mr. Larry Sandhu
Re: 21209001-1

Date of Sampling: 09-14-2012
Date of Receipt: 09-17-2012
Date of Report: 09-18-2012

MoldSCORE™: Spore Trap Report

Location: 21209001-1 TM10

Fungi Identified	Indoor sample spores/m3 <100 1K 10K >100K	Raw count	Spores/ m3	MoldSCORE‡ 100 200 300	Score
Generally able to grow indoors*					
Alternaria		ND	< 13		100
Bipolaris/Drechslera group		ND	< 13		100
Chaetomium		ND	< 13		100
Cladosporium		1	53		100
Curvularia		ND	< 13		100
Nigrospora		ND	< 13		100
Penicillium/Aspergillus types†		3	160		124
Stachybotrys		ND	< 13		100
Torula		ND	< 13		100
Seldom found growing indoors**					
Ascospores		ND	< 13		100
Basidiospores		ND	< 13		100
Rusts		ND	< 13		100
Smuts, Periconia, Myxomycetes		ND	< 13		100
Total			**213**	**Final MoldSCORE**	**124**

Location: 21209001-1 TM11

Fungi Identified	Indoor sample spores/m3 <100 1K 10K >100K	Raw count	Spores/ m3	MoldSCORE‡ 100 200 300	Score
Generally able to grow indoors*					
Alternaria		ND	< 13		100
Bipolaris/Drechslera group		ND	< 13		100
Chaetomium		ND	< 13		100
Cladosporium		ND	< 13		100
Curvularia		ND	< 13		100
Nigrospora		ND	< 13		100
Penicillium/Aspergillus types†		ND	< 13		100
Stachybotrys		ND	< 13		100
Torula		ND	< 13		100
Seldom found growing indoors**					
Ascospores		ND	< 13		100
Basidiospores		ND	< 13		100
Rusts		ND	< 13		100
Smuts, Periconia, Myxomycetes		ND	< 13		100
Total			**N/A**	**Final MoldSCORE**	**100**

EMLab P&K
880 Riverside Parkway, West Sacramento, CA 95605
(866) 888-6653 Fax (650) 829-5852 www.emlab.com

Client: Hygiene Technologies International, Inc.: Northern California
C/O: Mr. Kenny Hsi, Mr. Larry Sandhu
Re: 21209001-1

Date of Sampling: 09-14-2012
Date of Receipt: 09-17-2012
Date of Report: 09-18-2012

MoldSCORE™: Spore Trap Report

Location: 21209001-1 TM12

Fungi Identified	Indoor sample spores/m3 <100 1K 10K >100K	Raw count	Spores/ m3	MoldSCORE‡ 100 200 300	Score
Generally able to grow indoors*					
Alternaria		ND	< 13		100
Bipolaris/Drechslera group		1	13		105
Chaetomium		ND	< 13		100
Cladosporium		ND	< 13		100
Curvularia		ND	< 13		100
Nigrospora		ND	< 13		100
Penicillium/Aspergillus types†		ND	< 13		100
Stachybotrys		ND	< 13		100
Torula		ND	< 13		100
Seldom found growing indoors**					
Ascospores		ND	< 13		100
Basidiospores		ND	< 13		100
Rusts		ND	< 13		100
Smuts, Periconia, Myxomycetes		1	13		101
Total			**27**	**Final MoldSCORE**	**107**

Location: 21209001-1 TM13

Fungi Identified	Indoor sample spores/m3 <100 1K 10K >100K	Raw count	Spores/ m3	MoldSCORE‡ 100 200 300	Score
Generally able to grow indoors*					
Alternaria		ND	< 13		100
Bipolaris/Drechslera group		ND	< 13		100
Chaetomium		ND	< 13		100
Cladosporium		ND	< 13		100
Curvularia		ND	< 13		100
Nigrospora		ND	< 13		100
Penicillium/Aspergillus types†		ND	< 13		100
Stachybotrys		ND	< 13		100
Torula		ND	< 13		100
Seldom found growing indoors**					
Ascospores		ND	< 13		100
Basidiospores		ND	< 13		100
Rusts		ND	< 13		100
Smuts, Periconia, Myxomycetes		ND	< 13		100
Total			**N/A**	**Final MoldSCORE**	**100**

EMLab P&K
880 Riverside Parkway, West Sacramento, CA 95605
(866) 888-6653 Fax (650) 829-5852 www.emlab.com

Client: Hygiene Technologies International, Inc.: Northern California
C/O: Mr. Kenny Hsi, Mr. Larry Sandhu
Re: 21209001-1

Date of Sampling: 09-14-2012
Date of Receipt: 09-17-2012
Date of Report: 09-18-2012

MoldSCORE™: Spore Trap Report

Location: 21209001-1 TM14

Fungi Identified	Indoor sample spores/m3 <100 1K 10K >100K	Raw count	Spores/ m3	MoldSCORE‡ 100 200 300	Score
Generally able to grow indoors*					
Alternaria		ND	< 13		100
Bipolaris/Drechslera group		ND	< 13		100
Chaetomium		ND	< 13		100
Cladosporium		ND	< 13		100
Curvularia		ND	< 13		100
Nigrospora		ND	< 13		100
Penicillium/Aspergillus types†		1	53		108
Stachybotrys		ND	< 13		100
Torula		ND	< 13		100
Seldom found growing indoors**					
Ascospores		ND	< 13		100
Basidiospores		ND	< 13		100
Rusts		ND	< 13		100
Smuts, Periconia, Myxomycetes		ND	< 13		100
Total			**53**	**Final MoldSCORE**	**108**

*The spores in this category are generally capable of growing on wet building materials in addition to growing outdoors. Building related growth is dependent upon the fungal type, moisture level, type of material, and other factors. *Cladosporium* is one of the predominant spore types worldwide and is frequently present in high numbers. *Penicillium/Aspergillus* species colonize both outdoor and indoor wet surfaces rapidly and are very easily dispersed. Other genera are usually present in lesser numbers.

**These fungi are generally not found growing on wet building materials. For example, the rusts and smuts are obligate plant pathogens. However, in each group there are notable exceptions. For example, agents of wood decay are members of the basidiomycetes and high counts of a single morphological type of basidiospore on an inside sample should be considered significant.

†The spores of Aspergillus and Penicillium (and others such as Acremonium, Paecilomyces) are small and round with very few distinguishing characteristics. They cannot be differentiated by non-viable sampling methods.

‡Rated on a scale from 100 to 300. A rating less than 150 is low and indicates a low probability of spores originating inside. A rating greater than 250 is high and indicates a high probability that the spores originated from inside, presumably from indoor mold growth. A rating between 150 and 250 indicates a moderate likelihood of indoor fungal growth. MoldSCORE is NOT intended for wall cavity samples. It is intended for ambient air samples in residences. Using the analysis on other samples (like wall cavity samples) will lead to misleading results.

EMLab P&K
A TestAmerica Company

Report for:

Mr. Kenny Hsi, Mr. Larry Sandhu
Hygiene Technologies International, Inc.: Northern California
3625 Del Amo Boulevard, Suite 180
Torrance, CA 90503-8370

Regarding: Project: 21209001-1
EML ID: 973592

Approved by:

Lab Manager
Malcolm Moody

Dates of Analysis:
Spore trap analysis: 09-24-2012

Service SOPs: Spore trap analysis (1038)
AIHA accredited service

Document Number: 200091 - Revision Number: 5

EMLab P&K
880 Riverside Parkway, West Sacramento, CA 95605
(866) 888-6653 Fax (650) 829-5852 www.emlab.com

Client: Hygiene Technologies International, Inc.: Northern California
C/O: Mr. Kenny Hsi, Mr. Larry Sandhu
Re: 21209001-1

Date of Sampling: 09-21-2012
Date of Receipt: 09-21-2012
Date of Report: 09-24-2012

SPORE TRAP REPORT: NON-VIABLE METHODOLOGY

Location:	21209001-1 TM15OUT		21209001-1 TM16		21209001-1 TM17	
Comments (see below)	None		None		None	
Lab ID-Version‡:	4344128-1		4344129-1		4344130-1	
Analysis Date:	09/24/2012		09/24/2012		09/24/2012	
	raw ct.	spores/m3	raw ct.	spores/m3	raw ct.	spores/m3
Alternaria	1	13				
Ascospores	2	110				
Basidiospores	22	1,200	1	53		
Chaetomium	1	13				
Cladosporium	53	2,800				
Curvularia	1	13				
Epicoccum	2	27				
Myrothecium						
Nigrospora						
Oidium						
Other colorless						
Penicillium/Aspergillus types†	2	110				
Pithomyces						
Rusts	3	40				
Smuts, Periconia, Myxomycetes	16	210	8	110	1	13
Stachybotrys						
Stemphylium						
Torula	2	27				
Ulocladium						
Zygomycetes						
Background debris (1-4+)††	3+		2+		1+	
Hyphal fragments/m3	120		< 13		13	
Pollen/m3	< 13		< 13		< 13	
Skin cells (1-4+)	1+		1+		1+	
Sample volume (liters)	75		75		75	
§ TOTAL SPORES/m3		4,600		160		13

Comments:

Spore types listed without a count or data entry were not detected during the course of the analysis for the respective sample.
† The spores of *Aspergillus* and *Penicillium* (and others such as *Acremonium*, *Paecilomyces*) are small and round with very few distinguishing characteristics. They cannot be differentiated by non-viable sampling methods. Also, some species with very small spores are easily missed, and may be undercounted.
††Background debris indicates the amount of non-biological particulate matter present on the trace (dust in the air) and the resulting visibility for the analyst. It is rated from 1+ (low) to 4+ (high). Counts from areas with 4+ background debris should be regarded as minimal counts and may be higher then reported. It is important to account for samples volumes when evaluating dust levels.

The analytical sensitivity is the spores/m3 divided by the raw count. The limit of detection is the analytical sensitivity multiplied by the sample volume divided by 1000.

For more information regarding analytical sensitivity, please contact QA by calling the laboratory.
‡ A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".
§ Total Spores/m3 has been rounded to two significant figures to reflect analytical precision.

EMLab P&K
880 Riverside Parkway, West Sacramento, CA 95605
(866) 888-6653 Fax (650) 829-5852 www.emlab.com

Client: Hygiene Technologies International, Inc.: Northern California
C/O: Mr. Kenny Hsi, Mr. Larry Sandhu
Re: 21209001-1

Date of Sampling: 09-21-2012
Date of Receipt: 09-21-2012
Date of Report: 09-24-2012

SPORE TRAP REPORT: NON-VIABLE METHODOLOGY

Location:	21209001-1 TM18		21209001-1 TM19		21209001-1 TM20	
Comments (see below)	None		None		None	
Lab ID-Version‡:	4344131-1		4344132-1		4344133-1	
Analysis Date:	09/24/2012		09/24/2012		09/24/2012	
	raw ct.	spores/m3	raw ct.	spores/m3	raw ct.	spores/m3
Alternaria						
Ascospores						
Basidiospores						
Chaetomium						
Cladosporium					1	53
Curvularia						
Epicoccum						
Myrothecium						
Nigrospora			1	13		
Oidium			1	13		
Other colorless						
Penicillium/Aspergillus types†						
Pithomyces						
Rusts						
Smuts, Periconia, Myxomycetes	1	13	1	13	1	13
Stachybotrys						
Stemphylium						
Torula						
Ulocladium						
Zygomycetes						
Background debris (1-4+)††	2+		2+		2+	
Hyphal fragments/m3	53		13		27	
Pollen/m3	< 13		13		< 13	
Skin cells (1-4+)	1+		1+		1+	
Sample volume (liters)	75		75		75	
§ TOTAL SPORES/m3		13		40		67

Comments:

Spore types listed without a count or data entry were not detected during the course of the analysis for the respective sample.
† The spores of *Aspergillus* and *Penicillium* (and others such as *Acremonium*, *Paecilomyces*) are small and round with very few distinguishing characteristics. They cannot be differentiated by non-viable sampling methods. Also, some species with very small spores are easily missed, and may be undercounted.
††Background debris indicates the amount of non-biological particulate matter present on the trace (dust in the air) and the resulting visibility for the analyst. It is rated from 1+ (low) to 4+ (high). Counts from areas with 4+ background debris should be regarded as minimal counts and may be higher then reported. It is important to account for samples volumes when evaluating dust levels.

The analytical sensitivity is the spores/m3 divided by the raw count. The limit of detection is the analytical sensitivity multiplied by the sample volume divided by 1000.

For more information regarding analytical sensitivity, please contact QA by calling the laboratory.
‡ A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".
§ Total Spores/m3 has been rounded to two significant figures to reflect analytical precision.

EMLab P&K
880 Riverside Parkway, West Sacramento, CA 95605
(866) 888-6653 Fax (650) 829-5852 www.emlab.com

Client: Hygiene Technologies International, Inc.: Northern California
C/O: Mr. Kenny Hsi, Mr. Larry Sandhu
Re: 21209001-1

Date of Sampling: 09-21-2012
Date of Receipt: 09-21-2012
Date of Report: 09-24-2012

MoldRANGE™: Extended Outdoor Comparison

Outdoor Location: 21209001-1 TM15OUT

Fungi Identified	Outdoor data	Typical Outdoor Data for: September in California (n‡=14180)†						Typical Outdoor Data for: The entire year in California (n‡=175031)†					
	spores/m3	very low	low	med	high	very high	freq %	very low	low	med	high	very high	freq %
Generally able to grow indoors*													
Alternaria	13	13	13	27	53	93	61	13	13	27	67	110	55
Bipolaris/Drechslera group	-	7	13	13	27	53	19	7	13	13	27	40	12
Chaetomium	13	8	13	13	27	53	27	8	13	13	27	44	19
Cladosporium	2,800	170	320	850	2,100	3,500	99	110	210	640	1,700	2,800	97
Curvularia	13	7	13	13	40	60	16	7	13	13	27	53	6
Epicoccum	27	7	13	13	27	53	21	8	13	13	33	53	19
Nigrospora	-	10	13	13	40	93	18	7	13	13	27	53	8
Penicillium/Aspergillus types	110	53	110	270	750	1,200	90	53	110	210	590	1,000	85
Stachybotrys	-	7	13	13	27	67	5	7	13	13	33	67	4
Torula	27	7	13	13	40	67	14	8	13	13	40	67	12
Seldom found growing indoors**													
Ascospores	110	13	33	80	210	370	68	25	53	110	350	690	72
Basidiospores	1,200	49	67	190	480	850	93	53	80	270	1,000	2,300	94
Rusts	40	8	13	13	40	80	27	13	13	13	53	80	27
Smuts, Periconia, Myxomycetes	210	13	13	40	120	190	75	13	13	40	110	200	68
§ TOTAL SPORES/m3	4,600												

†The 'Typical Outdoor Data' represents the typical outdoor spore levels for the location and time frame indicated. The last column represents the frequency of occurrence. The very low, low, med, high, and very high values represent the 10, 20, 50, 80, and 90 percentile values of the spore type when it is detected. For example, if the frequency of occurrence is 63% and the low value is 53, it would mean that the given spore type is detected 63% of the time and, when detected, 20% of the time it is present in levels above the detection limit and below 53 spores/m3. These values are updated periodically, and if enough data is not available to make a statistically meaningful assessment, it is indicated with a dash.

§ Total Spores/m3 has been rounded to two significant figures to reflect analytical precision.

*The spores in this category are generally capable of growing on wet building materials in addition to growing outdoors. Building related growth is dependent upon the fungal type, moisture level, type of material, and other factors. *Cladosporium* is one of the predominant spore types worldwide and is frequently present in high numbers. *Penicillium/Aspergillus* species colonize both outdoor and indoor wet surfaces rapidly and are very easily dispersed. Other genera are usually present in lesser numbers.

**These fungi are generally not found growing on wet building materials. For example, the rusts and smuts are obligate plant pathogens. However, in each group there are notable exceptions. For example, agents of wood decay are members of the basidiomycetes and high counts of a single morphological type of basidiospore on an inside sample should be considered significant.

‡n = number of samples used to calculate data.

EMLab P&K
880 Riverside Parkway, West Sacramento, CA 95605
(866) 888-6653 Fax (650) 829-5852 www.emlab.com

Client: Hygiene Technologies International, Inc.: Northern California
C/O: Mr. Kenny Hsi, Mr. Larry Sandhu
Re: 21209001-1

Date of Sampling: 09-21-2012
Date of Receipt: 09-21-2012
Date of Report: 09-24-2012

MoldSTAT™: Supplementary Statistical Spore Trap Report

Outdoor Summary: 21209001-1 TM15OUT:

Species detected	Outdoor sample spores/m3 <100 1K 10K >100K	Typical outdoor ranges (North America)	Freq. %
Alternaria	13	7 - 33 - 560	47
Ascospores	110	13 - 190 - 5,400	77
Basidiospores	1,200	13 - 430 - 22,000	92
Chaetomium	13	7 - 13 - 150	10
Cladosporium	2,800	27 - 480 - 10,000	91
Curvularia	13	7 - 27 - 610	18
Epicoccum	27	7 - 20 - 360	26
Penicillium/Aspergillus types	110	13 - 160 - 2,600	70
Rusts	40	7 - 20 - 360	21
Smuts, Periconia, Myxomycetes	210	7 - 47 - 960	65
Torula	27	7 - 13 - 170	9
Total	4,600		

The "Typical outdoor ranges" and "Freq. %" columns show the typical low, medium, and high spore counts per cubic meter and the frequency of occurrence for the given spore type. The low, medium, and high values represent the 2.5, 50, and 97.5 percentile values when the spore type is detected. For example, if the low value is 53 and the frequency of occurence is 63%, it would mean that we typically detect the given spore type on 63 percent of all outdoor samples and, when detected, 2.5% of the time it is present in levels below 53 spores/m3.

Indoor Samples

Location: 21209001-1 TM16

% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)
Result: 3%	dF: 4 Result: 2.0000 Critical value: 9.4877 Inside Similar: Yes	Result: 0.3077	dF: 11 Result: 0.6318 Critical value: 0.5273 Outside Similar: Yes	Score: 120 Result: Low

Species Detected	Spores/m3 <100 1K 10K >100K
Basidiospores	53
Smuts, Periconia, Myxomycetes	110
Total	160

EMLab P&K
880 Riverside Parkway, West Sacramento, CA 95605
(866) 888-6653 Fax (650) 829-5852 www.emlab.com

Client: Hygiene Technologies International, Inc.: Northern California
C/O: Mr. Kenny Hsi, Mr. Larry Sandhu
Re: 21209001-1

Date of Sampling: 09-21-2012
Date of Receipt: 09-21-2012
Date of Report: 09-24-2012

MoldSTAT™: Supplementary Statistical Spore Trap Report

Location: 21209001-1 TM17

% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)
Result: < 1%	dF: 4 Result: 2.0000 Critical value: 9.4877 Inside Similar: Yes	Result: 0.1667	dF: 11 Result: 0.5386 Critical value: 0.5273 Outside Similar: Yes	Score: 102 Result: Low

Species Detected	Spores/m3 <100 1K 10K >100K
Smuts, Periconia, Myxomycetes	13
Total	13

Location: 21209001-1 TM18

% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)
Result: < 1%	dF: 4 Result: 2.0000 Critical value: 9.4877 Inside Similar: Yes	Result: 0.1667	dF: 11 Result: 0.5386 Critical value: 0.5273 Outside Similar: Yes	Score: 102 Result: Low

Species Detected	Spores/m3 <100 1K 10K >100K
Smuts, Periconia, Myxomycetes	13
Total	13

Location: 21209001-1 TM19

% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)
Result: < 1%	dF: 4 Result: 2.0000 Critical value: 9.4877 Inside Similar: Yes	Result: 0.1429	dF: 13 Result: -0.0082 Critical value: 0.4780 Outside Similar: No	Score: 107 Result: Low

Species Detected	Spores/m3 <100 1K 10K >100K
Nigrospora	13
Oidium	13
Smuts, Periconia, Myxomycetes	13
Total	40

EMLab P&K
880 Riverside Parkway, West Sacramento, CA 95605
(866) 888-6653 Fax (650) 829-5852 www.emlab.com

Client: Hygiene Technologies International, Inc.: Northern California
C/O: Mr. Kenny Hsi, Mr. Larry Sandhu
Re: 21209001-1

Date of Sampling: 09-21-2012
Date of Receipt: 09-21-2012
Date of Report: 09-24-2012

MoldSTAT™: Supplementary Statistical Spore Trap Report

Location: 21209001-1 TM20

% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)
Result: 1%	dF: 4 Result: 2.0000 Critical value: 9.4877 Inside Similar: Yes	Result: 0.3077	dF: 11 Result: 0.6955 Critical value: 0.5273 Outside Similar: Yes	Score: 102 Result: Low

Species Detected	Spores/m3 <100 1K 10K >100K
Cladosporium	53
Smuts, Periconia, Myxomycetes	13
Total	67

* The Friedman chi-square statistic is a non-parametric test that examines variation in a set of data (in this case, all indoor spore counts). The null hypothesis (H0) being tested is that there is no meaningful difference in the data for all indoor locations. The alternative hypothesis (used if the test disproves the null hypothesis) is that there is a difference between the indoor locations. The null hypothesis is rejected when the result of the test is greater than the critical value. The critical value that is displayed is based on the degrees of freedom (dF) of the test and a significance level of 0.05.

** An agreement ratio is a simple method for assessing the similarity of two samples (in this case the indoor sample and the outdoor summary) based on the spore types present. A score of one indicates that the types detected in one location are the same as that in the other. A score of zero indicates that none of the types detected indoors are present outdoors. Typically, an agreement of 0.8 or higher is considered high.

*** The Spearman rank correlation is a non-parametric test that examines correlation between two sets of data (in this case the indoor location and the outdoor summary). The null hypothesis (H0) being tested is that the indoor and outdoor samples are unrelated. The alternative hypothesis (used if the test disproves the null hypothesis) is that the samples are similar. The null hypothesis is rejected when the result of the test is greater than the critical value. The critical value that is displayed is based on the degrees of freedom (dF) of the test and a significance level of 0.05.

**** MoldSCORE™ is a specialized method for examining air sampling data. It is a score between 100 and 300, with 100 indicating a greater likelihood that the airborne indoor spores originated from the outside, and 300 indicating a greater likelihood that they originated from an inside source. The Result displayed is based on the numeric score given and will be either Low, Medium, or High, indicating a low, medium, or high likelihood that the spores detected originated from an indoor source. EMLab P&Kreserves the right to, and may at anytime, modify or change the MoldScore algorithm without notice.

Interpretation of the data contained in this report is left to the client or the persons who conducted the field work. This report is provided for informational and comparative purposes only and should not be relied upon for any other purpose. "Typical outdoor ranges" are based on the results of the analysis of samples delivered to and analyzed by EMLab P&K and assumptions regarding the origins of those samples. Sampling techniques, contaminants infecting samples, unrepresentative samples and other similar or dissimilar factors may affect these results. With the statistical analysis provided, as with all statistical comparisons and analyses, false-positive and false-negative results can and do occur. EMLab P&K hereby disclaims any liability for any and all direct, indirect, punitive, incidental, special or consequential damages arising out of the data contained in, or any actions taken or omitted in reliance upon, this report.

EMLab P&K
880 Riverside Parkway, West Sacramento, CA 95605
(866) 888-6653 Fax (650) 829-5852 www.emlab.com

Client: Hygiene Technologies International, Inc.: Northern California
C/O: Mr. Kenny Hsi, Mr. Larry Sandhu
Re: 21209001-1

Date of Sampling: 09-21-2012
Date of Receipt: 09-21-2012
Date of Report: 09-24-2012

MoldSCORE™: Spore Trap Report

Outdoor Sample: 21209001-1 TM15OUT

Fungi Identified	Outdoor sample spores/m3 <100 1K 10K >100K	Raw count	Spores/ m3
Generally able to grow indoors*			
Alternaria		1	13
Bipolaris/Drechslera group		ND	< 13
Chaetomium		1	13
Cladosporium		53	2,800
Curvularia		1	13
Epicoccum		2	27
Nigrospora		ND	< 13
Penicillium/Aspergillus types†		2	110
Stachybotrys		ND	< 13
Torula		2	27
Seldom found growing indoors**			
Ascospores		2	110
Basidiospores		22	1,200
Rusts		3	40
Smuts, Periconia, Myxomycetes		16	210
Total			**4,560**

Location: 21209001-1 TM16

Fungi Identified	Indoor sample spores/m3 <100 1K 10K >100K	Raw count	Spores/ m3	MoldSCORE‡ 100 200 300	Score
Generally able to grow indoors*					
Alternaria		ND	< 13		100
Bipolaris/Drechslera group		ND	< 13		100
Chaetomium		ND	< 13		100
Cladosporium		ND	< 13		100
Curvularia		ND	< 13		100
Nigrospora		ND	< 13		100
Penicillium/Aspergillus types†		ND	< 13		100
Stachybotrys		ND	< 13		100
Torula		ND	< 13		100
Seldom found growing indoors**					
Ascospores		ND	< 13		100
Basidiospores		1	53		101
Rusts		ND	< 13		100
Smuts, Periconia, Myxomycetes		8	110		120
Total			**160**	**Final MoldSCORE**	**120**

EMLab P&K
880 Riverside Parkway, West Sacramento, CA 95605
(866) 888-6653 Fax (650) 829-5852 www.emlab.com

Client: Hygiene Technologies International, Inc.: Northern California
C/O: Mr. Kenny Hsi, Mr. Larry Sandhu
Re: 21209001-1

Date of Sampling: 09-21-2012
Date of Receipt: 09-21-2012
Date of Report: 09-24-2012

MoldSCORE™: Spore Trap Report

Location: 21209001-1 TM17

Fungi Identified	Indoor sample spores/m3 <100 1K 10K >100K	Raw count	Spores/ m3	MoldSCORE‡ 100 200 300	Score
Generally able to grow indoors*					
Alternaria		ND	< 13		100
Bipolaris/Drechslera group		ND	< 13		100
Chaetomium		ND	< 13		100
Cladosporium		ND	< 13		100
Curvularia		ND	< 13		100
Nigrospora		ND	< 13		100
Penicillium/Aspergillus types†		ND	< 13		100
Stachybotrys		ND	< 13		100
Torula		ND	< 13		100
Seldom found growing indoors**					
Ascospores		ND	< 13		100
Basidiospores		ND	< 13		100
Rusts		ND	< 13		100
Smuts, Periconia, Myxomycetes		1	13		102
Total			**13**	**Final MoldSCORE**	**102**

Location: 21209001-1 TM18

Fungi Identified	Indoor sample spores/m3 <100 1K 10K >100K	Raw count	Spores/ m3	MoldSCORE‡ 100 200 300	Score
Generally able to grow indoors*					
Alternaria		ND	< 13		100
Bipolaris/Drechslera group		ND	< 13		100
Chaetomium		ND	< 13		100
Cladosporium		ND	< 13		100
Curvularia		ND	< 13		100
Nigrospora		ND	< 13		100
Penicillium/Aspergillus types†		ND	< 13		100
Stachybotrys		ND	< 13		100
Torula		ND	< 13		100
Seldom found growing indoors**					
Ascospores		ND	< 13		100
Basidiospores		ND	< 13		100
Rusts		ND	< 13		100
Smuts, Periconia, Myxomycetes		1	13		102
Total			**13**	**Final MoldSCORE**	**102**

EMLab P&K
880 Riverside Parkway, West Sacramento, CA 95605
(866) 888-6653 Fax (650) 829-5852 www.emlab.com

Client: Hygiene Technologies International, Inc.: Northern California
C/O: Mr. Kenny Hsi, Mr. Larry Sandhu
Re: 21209001-1

Date of Sampling: 09-21-2012
Date of Receipt: 09-21-2012
Date of Report: 09-24-2012

MoldSCORE™: Spore Trap Report

Location: 21209001-1 TM19

Fungi Identified	Indoor sample spores/m3 <100 1K 10K >100K	Raw count	Spores/ m3	MoldSCORE‡ 100 200 300	Score
Generally able to grow indoors*					
Alternaria		ND	< 13		100
Bipolaris/Drechslera group		ND	< 13		100
Chaetomium		ND	< 13		100
Cladosporium		ND	< 13		100
Curvularia		ND	< 13		100
Nigrospora		1	13		105
Penicillium/Aspergillus types†		ND	< 13		100
Stachybotrys		ND	< 13		100
Torula		ND	< 13		100
Seldom found growing indoors**					
Ascospores		ND	< 13		100
Basidiospores		ND	< 13		100
Oidium		1	13		105
Rusts		ND	< 13		100
Smuts, Periconia, Myxomycetes		1	13		102
Total			**40**	**Final MoldSCORE**	**107**

Location: 21209001-1 TM20

Fungi Identified	Indoor sample spores/m3 <100 1K 10K >100K	Raw count	Spores/ m3	MoldSCORE‡ 100 200 300	Score
Generally able to grow indoors*					
Alternaria		ND	< 13		100
Bipolaris/Drechslera group		ND	< 13		100
Chaetomium		ND	< 13		100
Cladosporium		1	53		101
Curvularia		ND	< 13		100
Nigrospora		ND	< 13		100
Penicillium/Aspergillus types†		ND	< 13		100
Stachybotrys		ND	< 13		100
Torula		ND	< 13		100
Seldom found growing indoors**					
Ascospores		ND	< 13		100
Basidiospores		ND	< 13		100
Rusts		ND	< 13		100
Smuts, Periconia, Myxomycetes		1	13		102
Total			**67**	**Final MoldSCORE**	**102**

EMLab P&K
880 Riverside Parkway, West Sacramento, CA 95605
(866) 888-6653 Fax (650) 829-5852 www.emlab.com

Client: Hygiene Technologies International, Inc.: Northern California
C/O: Mr. Kenny Hsi, Mr. Larry Sandhu
Re: 21209001-1

Date of Sampling: 09-21-2012
Date of Receipt: 09-21-2012
Date of Report: 09-24-2012

MoldSCORE™: Spore Trap Report

*The spores in this category are generally capable of growing on wet building materials in addition to growing outdoors. Building related growth is dependent upon the fungal type, moisture level, type of material, and other factors. *Cladosporium* is one of the predominant spore types worldwide and is frequently present in high numbers. *Penicillium/Aspergillus* species colonize both outdoor and indoor wet surfaces rapidly and are very easily dispersed. Other genera are usually present in lesser numbers.

**These fungi are generally not found growing on wet building materials. For example, the rusts and smuts are obligate plant pathogens. However, in each group there are notable exceptions. For example, agents of wood decay are members of the basidiomycetes and high counts of a single morphological type of basidiospore on an inside sample should be considered significant.

†The spores of Aspergillus and Penicillium (and others such as Acremonium, Paecilomyces) are small and round with very few distinguishing characteristics. They cannot be differentiated by non-viable sampling methods.

‡Rated on a scale from 100 to 300. A rating less than 150 is low and indicates a low probability of spores originating inside. A rating greater than 250 is high and indicates a high probability that the spores originated from inside, presumably from indoor mold growth. A rating between 150 and 250 indicates a moderate likelihood of indoor fungal growth. MoldSCORE is NOT intended for wall cavity samples. It is intended for ambient air samples in residences. Using the analysis on other samples (like wall cavity samples) will lead to misleading results.

EMLab P&K
A TestAmerica Company

Report for:

Mr. Kenny Hsi, Mr. Larry Sandhu
Hygiene Technologies International, Inc.: Northern California
3625 Del Amo Boulevard, Suite 180
Torrance, CA 90503-8370

Regarding: Project: 21209001-1
EML ID: 977026

Approved by:

Lab Manager
Malcolm Moody

Dates of Analysis:
Spore trap analysis: 10-02-2012

Service SOPs: Spore trap analysis (1038)
AIHA accredited service

Document Number: 200091 - Revision Number: 5

EMLab P&K
880 Riverside Parkway, West Sacramento, CA 95605
(866) 888-6653 Fax (650) 829-5852 www.emlab.com

Client: Hygiene Technologies International, Inc.: Northern California
C/O: Mr. Kenny Hsi, Mr. Larry Sandhu
Re: 21209001-1

Date of Sampling: 09-28-2012
Date of Receipt: 10-01-2012
Date of Report: 10-02-2012

SPORE TRAP REPORT: NON-VIABLE METHODOLOGY

Location:	21209001-1TM21OUT		21209001-1TM22		21209001-1TM23	
Comments (see below)	None		None		None	
Lab ID-Version‡:	4359634-1		4359635-1		4359636-1	
Analysis Date:	10/02/2012		10/02/2012		10/02/2012	
	raw ct.	spores/m3	raw ct.	spores/m3	raw ct.	spores/m3
Alternaria	4	53				
Ascospores	1	53				
Basidiospores	11	590	2	110	1	53
Chaetomium	3	40				
Cladosporium	49	2,600				
Curvularia						
Epicoccum						
Fusarium						
Myrothecium						
Nigrospora	7	93				
Other colorless						
Penicillium/Aspergillus types†	28	1,500				
Pithomyces						
Rusts						
Smuts, Periconia, Myxomycetes	103	1,400	1	13		
Stachybotrys	1	13				
Stemphylium	1	13				
Torula						
Ulocladium						
Zygomycetes						
Background debris (1-4+)††	3+		2+		2+	
Hyphal fragments/m3	130		< 13		< 13	
Pollen/m3	27		27		< 13	
Skin cells (1-4+)	< 1+		1+		1+	
Sample volume (liters)	75		75		75	
§ TOTAL SPORES/m3		6,300		120		53

Comments:

Spore types listed without a count or data entry were not detected during the course of the analysis for the respective sample.
† The spores of *Aspergillus* and *Penicillium* (and others such as *Acremonium*, *Paecilomyces*) are small and round with very few distinguishing characteristics. They cannot be differentiated by non-viable sampling methods. Also, some species with very small spores are easily missed, and may be undercounted.
††Background debris indicates the amount of non-biological particulate matter present on the trace (dust in the air) and the resulting visibility for the analyst. It is rated from 1+ (low) to 4+ (high). Counts from areas with 4+ background debris should be regarded as minimal counts and may be higher then reported. It is important to account for samples volumes when evaluating dust levels.

The analytical sensitivity is the spores/m3 divided by the raw count. The limit of detection is the analytical sensitivity multiplied by the sample volume divided by 1000.

For more information regarding analytical sensitivity, please contact QA by calling the laboratory.
‡ A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".
§ Total Spores/m3 has been rounded to two significant figures to reflect analytical precision.

EMLab P&K
880 Riverside Parkway, West Sacramento, CA 95605
(866) 888-6653 Fax (650) 829-5852 www.emlab.com

Client: Hygiene Technologies International, Inc.: Northern California
C/O: Mr. Kenny Hsi, Mr. Larry Sandhu
Re: 21209001-1

Date of Sampling: 09-28-2012
Date of Receipt: 10-01-2012
Date of Report: 10-02-2012

SPORE TRAP REPORT: NON-VIABLE METHODOLOGY

Location:	21209001-1TM24		21209001-1TM25		21209001-1TM26	
Comments (see below)	None		None		None	
Lab ID-Version‡:	4359637-1		4359638-1		4359639-1	
Analysis Date:	10/02/2012		10/02/2012		10/02/2012	
	raw ct.	spores/m3	raw ct.	spores/m3	raw ct.	spores/m3
Alternaria						
Ascospores						
Basidiospores	1	53	2	110	1	53
Chaetomium						
Cladosporium						
Curvularia						
Epicoccum						
Fusarium						
Myrothecium						
Nigrospora						
Other colorless						
Penicillium/Aspergillus types†	2	110			1	53
Pithomyces						
Rusts						
Smuts, Periconia, Myxomycetes						
Stachybotrys						
Stemphylium						
Torula						
Ulocladium						
Zygomycetes						
Background debris (1-4+)††	3+		2+		2+	
Hyphal fragments/m3	13		< 13		< 13	
Pollen/m3	< 13		< 13		< 13	
Skin cells (1-4+)	2+		1+		1+	
Sample volume (liters)	75		75		75	
§ TOTAL SPORES/m3		160		110		110

Comments:

Spore types listed without a count or data entry were not detected during the course of the analysis for the respective sample.
† The spores of *Aspergillus* and *Penicillium* (and others such as *Acremonium*, *Paecilomyces*) are small and round with very few distinguishing characteristics. They cannot be differentiated by non-viable sampling methods. Also, some species with very small spores are easily missed, and may be undercounted.
††Background debris indicates the amount of non-biological particulate matter present on the trace (dust in the air) and the resulting visibility for the analyst. It is rated from 1+ (low) to 4+ (high). Counts from areas with 4+ background debris should be regarded as minimal counts and may be higher then reported. It is important to account for samples volumes when evaluating dust levels.

The analytical sensitivity is the spores/m3 divided by the raw count. The limit of detection is the analytical sensitivity multiplied by the sample volume divided by 1000.

For more information regarding analytical sensitivity, please contact QA by calling the laboratory.
‡ A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".
§ Total Spores/m3 has been rounded to two significant figures to reflect analytical precision.

EMLab P&K
880 Riverside Parkway, West Sacramento, CA 95605
(866) 888-6653 Fax (650) 829-5852 www.emlab.com

Client: Hygiene Technologies International, Inc.: Northern California
C/O: Mr. Kenny Hsi, Mr. Larry Sandhu
Re: 21209001-1

Date of Sampling: 09-28-2012
Date of Receipt: 10-01-2012
Date of Report: 10-02-2012

MoldRANGE™: Extended Outdoor Comparison

Outdoor Location: 21209001-1TM21OUT

Fungi Identified	Outdoor data	Typical Outdoor Data for: September in California (n‡=14180)†						Typical Outdoor Data for: The entire year in California (n‡=175031)†					
	spores/m3	very low	low	med	high	very high	freq %	very low	low	med	high	very high	freq %
Generally able to grow indoors*													
Alternaria	53	13	13	27	53	93	61	13	13	27	67	110	55
Bipolaris/Drechslera group	-	7	13	13	27	53	19	7	13	13	27	40	12
Chaetomium	40	8	13	13	27	53	27	8	13	13	27	44	19
Cladosporium	2,600	170	320	850	2,100	3,500	99	110	210	640	1,700	2,800	97
Curvularia	-	7	13	13	40	60	16	7	13	13	27	53	6
Nigrospora	93	10	13	13	40	93	18	7	13	13	27	53	8
Penicillium/Aspergillus types	1,500	53	110	270	750	1,200	90	53	110	210	590	1,000	85
Stachybotrys	13	7	13	13	27	67	5	7	13	13	33	67	4
Stemphylium	13	7	13	13	27	40	10	7	13	13	27	40	9
Torula	-	7	13	13	40	67	14	8	13	13	40	67	12
Seldom found growing indoors**													
Ascospores	53	13	33	80	210	370	68	25	53	110	350	690	72
Basidiospores	590	49	67	190	480	850	93	53	80	270	1,000	2,300	94
Rusts	-	8	13	13	40	80	27	13	13	13	53	80	27
Smuts, Periconia, Myxomycetes	1,400	13	13	40	120	190	75	13	13	40	110	200	68
§ TOTAL SPORES/m3	6,300												

†The 'Typical Outdoor Data' represents the typical outdoor spore levels for the location and time frame indicated. The last column represents the frequency of occurrence. The very low, low, med, high, and very high values represent the 10, 20, 50, 80, and 90 percentile values of the spore type when it is detected. For example, if the frequency of occurrence is 63% and the low value is 53, it would mean that the given spore type is detected 63% of the time and, when detected, 20% of the time it is present in levels above the detection limit and below 53 spores/m3. These values are updated periodically, and if enough data is not available to make a statistically meaningful assessment, it is indicated with a dash.

§ Total Spores/m3 has been rounded to two significant figures to reflect analytical precision.

*The spores in this category are generally capable of growing on wet building materials in addition to growing outdoors. Building related growth is dependent upon the fungal type, moisture level, type of material, and other factors. *Cladosporium* is one of the predominant spore types worldwide and is frequently present in high numbers. *Penicillium/Aspergillus* species colonize both outdoor and indoor wet surfaces rapidly and are very easily dispersed. Other genera are usually present in lesser numbers.

**These fungi are generally not found growing on wet building materials. For example, the rusts and smuts are obligate plant pathogens. However, in each group there are notable exceptions. For example, agents of wood decay are members of the basidiomycetes and high counts of a single morphological type of basidiospore on an inside sample should be considered significant.

‡n = number of samples used to calculate data.

Interpretation of the data contained in this report is left to the client or the persons who conducted the field work. This report is provided for informational and comparative purposes only and should not be relied upon for any other purpose. "Typical outdoor data" are based on the results of the analysis of samples delivered to and analyzed by EMLab P&K and assumptions regarding the origins of those samples. Sampling techniques, contaminants infecting samples, unrepresentative samples and other similar or dissimilar factors may affect these results. In addition, EMLab P&K may not have received and tested a representative number of samples for every region or time period. EMLab P&K hereby disclaims any liability for any and all direct, indirect, punitive, incidental, special or consequential damages arising out of the use or interpretation of the data contained in, or any actions taken or omitted in reliance upon, this report.

EMLab P&K
880 Riverside Parkway, West Sacramento, CA 95605
(866) 888-6653 Fax (650) 829-5852 www.emlab.com

Client: Hygiene Technologies International, Inc.: Northern California
C/O: Mr. Kenny Hsi, Mr. Larry Sandhu
Re: 21209001-1

Date of Sampling: 09-28-2012
Date of Receipt: 10-01-2012
Date of Report: 10-02-2012

MoldSTAT™: Supplementary Statistical Spore Trap Report

Outdoor Summary: 21209001-1TM21OUT:

Species detected	Outdoor sample spores/m3 <100 1K 10K >100K	Typical outdoor ranges (North America)	Freq. %
Alternaria	53	7 - 33 - 560	47
Ascospores	53	13 - 190 - 5,400	77
Basidiospores	590	13 - 430 - 22,000	92
Chaetomium	40	7 - 13 - 150	10
Cladosporium	2,600	27 - 480 - 10,000	91
Nigrospora	93	7 - 13 - 230	16
Penicillium/Aspergillus types	1,500	13 - 160 - 2,600	70
Smuts, Periconia, Myxomycetes	1,400	7 - 47 - 960	65
Stachybotrys	13	7 - 13 - 530	3
Stemphylium	13	7 - 13 - 80	3
Total	6,300		

The "Typical outdoor ranges" and "Freq. %" columns show the typical low, medium, and high spore counts per cubic meter and the frequency of occurrence for the given spore type. The low, medium, and high values represent the 2.5, 50, and 97.5 percentile values when the spore type is detected. For example, if the low value is 53 and the frequency of occurence is 63%, it would mean that we typically detect the given spore type on 63 percent of all outdoor samples and, when detected, 2.5% of the time it is present in levels below 53 spores/m3.

Indoor Samples

Location: 21209001-1TM22

% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)
Result: 1%	dF: 4 Result: 1.7333 Critical value: 9.4877 Inside Similar: Yes	Result: 0.3333	dF: 10 Result: 0.4970 Critical value: 0.5515 Outside Similar: No	Score: 111 Result: Low

Species Detected	Spores/m3 <100 1K 10K >100K
Basidiospores	110
Smuts, Periconia, Myxomycetes	13
Total	120

EMLab P&K
880 Riverside Parkway, West Sacramento, CA 95605
(866) 888-6653 Fax (650) 829-5852 www.emlab.com

Client: Hygiene Technologies International, Inc.: Northern California
C/O: Mr. Kenny Hsi, Mr. Larry Sandhu
Re: 21209001-1

Date of Sampling: 09-28-2012
Date of Receipt: 10-01-2012
Date of Report: 10-02-2012

MoldSTAT™: Supplementary Statistical Spore Trap Report

Location: 21209001-1TM23

% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)
Result: < 1%	dF: 4 Result: 1.7333 Critical value: 9.4877 Inside Similar: Yes	Result: 0.1818	dF: 10 Result: 0.4606 Critical value: 0.5515 Outside Similar: No	Score: 105 Result: Low

Species Detected	Spores/m3 <100 1K 10K >100K
Basidiospores	53
Total	53

Location: 21209001-1TM24

% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)
Result: 2%	dF: 4 Result: 1.7333 Critical value: 9.4877 Inside Similar: Yes	Result: 0.3333	dF: 10 Result: 0.5758 Critical value: 0.5515 Outside Similar: Yes	Score: 111 Result: Low

Species Detected	Spores/m3 <100 1K 10K >100K
Basidiospores	53
Penicillium/Aspergillus types	110
Total	160

Location: 21209001-1TM25

% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)
Result: 1%	dF: 4 Result: 1.7333 Critical value: 9.4877 Inside Similar: Yes	Result: 0.1818	dF: 10 Result: 0.4606 Critical value: 0.5515 Outside Similar: No	Score: 111 Result: Low

Species Detected	Spores/m3 <100 1K 10K >100K
Basidiospores	110
Total	110

EMLab P&K
880 Riverside Parkway, West Sacramento, CA 95605
(866) 888-6653 Fax (650) 829-5852 www.emlab.com

Client: Hygiene Technologies International, Inc.: Northern California
C/O: Mr. Kenny Hsi, Mr. Larry Sandhu
Re: 21209001-1

Date of Sampling: 09-28-2012
Date of Receipt: 10-01-2012
Date of Report: 10-02-2012

MoldSTAT™: Supplementary Statistical Spore Trap Report

Location: 21209001-1TM26

% of outdoor total spores/m3	Friedman chi-square* (indoor variation)	Agreement ratio** (indoor/outdoor)	Spearman rank correlation*** (indoor/outdoor)	MoldSCORE**** (indoor/outdoor)
Result: 1%	dF: 4 Result: 1.7333 Critical value: 9.4877 Inside Similar: Yes	Result: 0.3333	dF: 10 Result: 0.5667 Critical value: 0.5515 Outside Similar: Yes	Score: 105 Result: Low

Species Detected	Spores/m3 <100 1K 10K >100K
Basidiospores	53
Penicillium/Aspergillus types	53
Total	110

* The Friedman chi-square statistic is a non-parametric test that examines variation in a set of data (in this case, all indoor spore counts). The null hypothesis (H0) being tested is that there is no meaningful difference in the data for all indoor locations. The alternative hypothesis (used if the test disproves the null hypothesis) is that there is a difference between the indoor locations. The null hypothesis is rejected when the result of the test is greater than the critical value. The critical value that is displayed is based on the degrees of freedom (dF) of the test and a significance level of 0.05.

** An agreement ratio is a simple method for assessing the similarity of two samples (in this case the indoor sample and the outdoor summary) based on the spore types present. A score of one indicates that the types detected in one location are the same as that in the other. A score of zero indicates that none of the types detected indoors are present outdoors. Typically, an agreement of 0.8 or higher is considered high.

*** The Spearman rank correlation is a non-parametric test that examines correlation between two sets of data (in this case the indoor location and the outdoor summary). The null hypothesis (H0) being tested is that the indoor and outdoor samples are unrelated. The alternative hypothesis (used if the test disproves the null hypothesis) is that the samples are similar. The null hypothesis is rejected when the result of the test is greater than the critical value. The critical value that is displayed is based on the degrees of freedom (dF) of the test and a significance level of 0.05.

**** MoldSCORE™ is a specialized method for examining air sampling data. It is a score between 100 and 300, with 100 indicating a greater likelihood that the airborne indoor spores originated from the outside, and 300 indicating a greater likelihood that they originated from an inside source. The Result displayed is based on the numeric score given and will be either Low, Medium, or High, indicating a low, medium, or high likelihood that the spores detected originated from an indoor source. EMLab P&Kreserves the right to, and may at anytime, modify or change the MoldScore algorithm without notice.

Interpretation of the data contained in this report is left to the client or the persons who conducted the field work. This report is provided for informational and comparative purposes only and should not be relied upon for any other purpose. "Typical outdoor ranges" are based on the results of the analysis of samples delivered to and analyzed by EMLab P&K and assumptions regarding the origins of those samples. Sampling techniques, contaminants infecting samples, unrepresentative samples and other similar or dissimilar factors may affect these results. With the statistical analysis provided, as with all statistical comparisons and analyses, false-positive and false-negative results can and do occur. EMLab P&K hereby disclaims any liability for any and all direct, indirect, punitive, incidental, special or consequential damages arising out of the data contained in, or any actions taken or omitted in reliance upon, this report.

EMLab P&K
880 Riverside Parkway, West Sacramento, CA 95605
(866) 888-6653 Fax (650) 829-5852 www.emlab.com

Client: Hygiene Technologies International, Inc.: Northern California
C/O: Mr. Kenny Hsi, Mr. Larry Sandhu
Re: 21209001-1

Date of Sampling: 09-28-2012
Date of Receipt: 10-01-2012
Date of Report: 10-02-2012

MoldSCORE™: Spore Trap Report

Outdoor Sample: 21209001-1TM21OUT

Fungi Identified	Outdoor sample spores/m3 <100 1K 10K >100K	Raw count	Spores/ m3
Generally able to grow indoors*			
Alternaria		4	53
Bipolaris/Drechslera group		ND	< 13
Chaetomium		3	40
Cladosporium		49	2,600
Curvularia		ND	< 13
Nigrospora		7	93
Penicillium/Aspergillus types†		28	1,500
Stachybotrys		1	13
Stemphylium		1	13
Torula		ND	< 13
Seldom found growing indoors**			
Ascospores		1	53
Basidiospores		11	590
Rusts		ND	< 13
Smuts, Periconia, Myxomycetes		103	1,400
Total			**6,333**

Location: 21209001-1TM22

Fungi Identified	Indoor sample spores/m3 <100 1K 10K >100K	Raw count	Spores/ m3	MoldSCORE‡ 100 200 300	Score
Generally able to grow indoors*					
Alternaria		ND	< 13		100
Bipolaris/Drechslera group		ND	< 13		100
Chaetomium		ND	< 13		100
Cladosporium		ND	< 13		100
Curvularia		ND	< 13		100
Nigrospora		ND	< 13		100
Penicillium/Aspergillus types†		ND	< 13		100
Stachybotrys		ND	< 13		100
Torula		ND	< 13		100
Seldom found growing indoors**					
Ascospores		ND	< 13		100
Basidiospores		2	110		111
Rusts		ND	< 13		100
Smuts, Periconia, Myxomycetes		1	13		100
Total			**120**	**Final MoldSCORE**	**111**

EMLab P&K
880 Riverside Parkway, West Sacramento, CA 95605
(866) 888-6653 Fax (650) 829-5852 www.emlab.com

Client: Hygiene Technologies International, Inc.: Northern California
C/O: Mr. Kenny Hsi, Mr. Larry Sandhu
Re: 21209001-1

Date of Sampling: 09-28-2012
Date of Receipt: 10-01-2012
Date of Report: 10-02-2012

MoldSCORE™: Spore Trap Report

Location: 21209001-1TM23

Fungi Identified	Indoor sample spores/m3 <100 1K 10K >100K	Raw count	Spores/ m3	MoldSCORE‡ 100 200 300	Score
Generally able to grow indoors*					
Alternaria		ND	< 13		100
Bipolaris/Drechslera group		ND	< 13		100
Chaetomium		ND	< 13		100
Cladosporium		ND	< 13		100
Curvularia		ND	< 13		100
Nigrospora		ND	< 13		100
Penicillium/Aspergillus types†		ND	< 13		100
Stachybotrys		ND	< 13		100
Torula		ND	< 13		100
Seldom found growing indoors**					
Ascospores		ND	< 13		100
Basidiospores		1	53		105
Rusts		ND	< 13		100
Smuts, Periconia, Myxomycetes		ND	< 13		100
Total			**53**	**Final MoldSCORE**	**105**

Location: 21209001-1TM24

Fungi Identified	Indoor sample spores/m3 <100 1K 10K >100K	Raw count	Spores/ m3	MoldSCORE‡ 100 200 300	Score
Generally able to grow indoors*					
Alternaria		ND	< 13		100
Bipolaris/Drechslera group		ND	< 13		100
Chaetomium		ND	< 13		100
Cladosporium		ND	< 13		100
Curvularia		ND	< 13		100
Nigrospora		ND	< 13		100
Penicillium/Aspergillus types†		2	110		111
Stachybotrys		ND	< 13		100
Torula		ND	< 13		100
Seldom found growing indoors**					
Ascospores		ND	< 13		100
Basidiospores		1	53		104
Rusts		ND	< 13		100
Smuts, Periconia, Myxomycetes		ND	< 13		100
Total			**160**	**Final MoldSCORE**	**111**

EMLab P&K
880 Riverside Parkway, West Sacramento, CA 95605
(866) 888-6653 Fax (650) 829-5852 www.emlab.com

Client: Hygiene Technologies International, Inc.: Northern California
C/O: Mr. Kenny Hsi, Mr. Larry Sandhu
Re: 21209001-1

Date of Sampling: 09-28-2012
Date of Receipt: 10-01-2012
Date of Report: 10-02-2012

MoldSCORE™: Spore Trap Report

Location: 21209001-1TM25

Fungi Identified	Indoor sample spores/m3 <100 1K 10K >100K	Raw count	Spores/ m3	MoldSCORE‡ 100 200 300	Score
Generally able to grow indoors*					
Alternaria		ND	< 13		100
Bipolaris/Drechslera group		ND	< 13		100
Chaetomium		ND	< 13		100
Cladosporium		ND	< 13		100
Curvularia		ND	< 13		100
Nigrospora		ND	< 13		100
Penicillium/Aspergillus types†		ND	< 13		100
Stachybotrys		ND	< 13		100
Torula		ND	< 13		100
Seldom found growing indoors**					
Ascospores		ND	< 13		100
Basidiospores		2	110		111
Rusts		ND	< 13		100
Smuts, Periconia, Myxomycetes		ND	< 13		100
Total			**107**	**Final MoldSCORE**	**111**

Location: 21209001-1TM26

Fungi Identified	Indoor sample spores/m3 <100 1K 10K >100K	Raw count	Spores/ m3	MoldSCORE‡ 100 200 300	Score
Generally able to grow indoors*					
Alternaria		ND	< 13		100
Bipolaris/Drechslera group		ND	< 13		100
Chaetomium		ND	< 13		100
Cladosporium		ND	< 13		100
Curvularia		ND	< 13		100
Nigrospora		ND	< 13		100
Penicillium/Aspergillus types†		1	53		104
Stachybotrys		ND	< 13		100
Torula		ND	< 13		100
Seldom found growing indoors**					
Ascospores		ND	< 13		100
Basidiospores		1	53		105
Rusts		ND	< 13		100
Smuts, Periconia, Myxomycetes		ND	< 13		100
Total			**107**	**Final MoldSCORE**	**105**

EMLab P&K
880 Riverside Parkway, West Sacramento, CA 95605
(866) 888-6653 Fax (650) 829-5852 www.emlab.com

Client: Hygiene Technologies International, Inc.: Northern California
C/O: Mr. Kenny Hsi, Mr. Larry Sandhu
Re: 21209001-1

Date of Sampling: 09-28-2012
Date of Receipt: 10-01-2012
Date of Report: 10-02-2012

MoldSCORE™: Spore Trap Report

*The spores in this category are generally capable of growing on wet building materials in addition to growing outdoors. Building related growth is dependent upon the fungal type, moisture level, type of material, and other factors. *Cladosporium* is one of the predominant spore types worldwide and is frequently present in high numbers. *Penicillium/Aspergillus* species colonize both outdoor and indoor wet surfaces rapidly and are very easily dispersed. Other genera are usually present in lesser numbers.

**These fungi are generally not found growing on wet building materials. For example, the rusts and smuts are obligate plant pathogens. However, in each group there are notable exceptions. For example, agents of wood decay are members of the basidiomycetes and high counts of a single morphological type of basidiospore on an inside sample should be considered significant.

†The spores of Aspergillus and Penicillium (and others such as Acremonium, Paecilomyces) are small and round with very few distinguishing characteristics. They cannot be differentiated by non-viable sampling methods.

‡Rated on a scale from 100 to 300. A rating less than 150 is low and indicates a low probability of spores originating inside. A rating greater than 250 is high and indicates a high probability that the spores originated from inside, presumably from indoor mold growth. A rating between 150 and 250 indicates a moderate likelihood of indoor fungal growth. MoldSCORE is NOT intended for wall cavity samples. It is intended for ambient air samples in residences. Using the analysis on other samples (like wall cavity samples) will lead to misleading results.

HYGIENE TECH
Hygiene Technologies International, Inc.

000967506

3625 Del Amo Boulevard, Suite 180
Torrance, California 90503-1643
(310) 370-8370
(310) 370-2474 FAX
www.hygienetech.com

Request For Analysis

Project Number/~~Purchase Order~~: 212090001-1 Date Submitted: 9/7/12

Project Contact: Lsandlin (K-Lsi) Turnaround Required: Normal

Lab Destination: EMLAB Lab Contact: Sample Receiving

SAMPLE ID	VOLUME	MEDIA	ANALYSIS REQUESTED
212090001-1 TM01	75L	APEX-Cell	Spore Trap Analysis
TM02	↓	↓	↓
TM03			
TM04			
TM05			

~~Special Instructions~~: Random Sampling (Area 2-1)

1. **Sampled by:** Lsandlin on 9/7/12 @ 16:30 **Received by:**
2. **Relinquished by:** Lsandlin on 9/9/12 @ 17:30 **Received by:** 9/10/12 9AM
3. **Relinquished by:** **Received by:**

Please include signature, date, and time

Lab Use Only:

HYGIENE TECH
Hygiene Technologies International, Inc.
000970982
Torrance, California 90503-1643
(310) 370-8370
(310) 370-2474 FAX
www.hygienetech.com

Request For Analysis

Project Number/~~Purchase Order~~: 21209001-1 Date Submitted: 9/14/12

Project Contact: L. Sandhu/K. Hsi Turnaround Required: Normal

Lab Destination: EMLAB Lab Contact: Sample Receiving

SAMPLE ID	VOLUME	MEDIA	ANALYSIS REQUESTED
21209001-1 TM06	75L	ARM-cell	Spore Trap
21209001-1 TM07			
21209001-1 TM08			
21209001-1 TM09			
21209001-1 TM10			
21209001-1 TM11			
21209001-1 TM12			
21209001-1 TM13			
21209001-1 TM14			

Special Instructions:

1. **Sampled by:** ~~Sandhu~~ on 9/14/12 @ 15:30 **Received by:**
2. **Relinquished by:** ~~Sandhu~~ on 9/16/12 @ 12:00 **Received by:** 9/17/12 1257
3. **Relinquished by:** **Received by:**

Please include signature, date, and time

Lab Use Only:

HYGIENE TECH
Hygiene Technologies International, Inc.
3625 Del Amo Boulevard, Suite 180
Torrance, California 90503-1643
(310) 370-8370
(310) 370-2474 FAX
www.hygienetech.com

000973592

Request For Analysis

Project Number/~~Purchase Order~~: 2120900l-1 Date Submitted: 9/21/12

Project Contact: L.Sandhu / K.Hsi Turnaround Required: Normal

Lab Destination: EMLAB Lab Contact: Sample Receiving

SAMPLE ID	VOLUME	MEDIA	ANALYSIS REQUESTED
2120900l-1 TM15 out	75L	Air-o-cell	Spore Trap Analysis
2120900l-1 TM16			
2120900l-1 TM17			
2120900l-1 TM18			
2120900l-1 TM19			
2120900l-1 TM20	↓	↓	↓

~~Special Instructions~~: Random Sampling (Round-3)

1. **Sampled by:** Sandhu on 9/21/12 @ 10:14 **Received by:** CM.V 9/21/12
2. **Relinquished by:** Sandhu on 9/21/12 @ 13:15 **Received by:** _____
3. **Relinquished by:** _____ **Received by:** _____

Please include signature, date, and time

Lab Use Only:

HYGIENE TECH
Hygiene Technologies International, Inc.
3625 D[illegible]
Torrance, California 90503
(310) 370-8370
(310) 370-2474 FAX
www.hygienetech.com

000977026

Request For Analysis

Project Number/Purchase Order: 21209001 — 1 Date Submitted: 09/28/12

Project Contact: L Sandhu / K-HSI Turnaround Required: Normal TAT

Lab Destination: EMLab P&K. Lab Contact: Simone Singh.

SAMPLE ID	VOLUME	MEDIA	ANALYSIS REQUESTED
21209001-1Tm21 out	75L	aircell	total fungi in air
21209001-1Tm22			
21209001-1Tm23			
21209001-1Tm24			
21209001-1Tm25			
21209001-1Tm26			

Special Instructions: NOTE: Random Sampling

1. Sampled by: pcheema 12:00 9/28.
2. Relinquished by: pcheema 16:00 9/28 Received by:
3. Relinquished by: [signature] on 9/28/12 @ 18:30 Received by: [signature] on 9/28/12 @ 16:00
Received by: [signature] 10/1/12 8:40 AM

Please include signature, date, and time

Lab Use Only: